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ABSTRACT

Nonteaching career options for undergraduate physical education majors are explored in this report. Two committees, each of which addressed different aspects of the topic, compiled their findings for the National Association for Sport and Physical Education. One committee identified types of options currently offered by colleges throughout the country. The other investigated procedures that would be useful in advising or selecting prospective students into the appropriate career option. The physical education curriculum of higher educational institutions is examined with specific emphasis on nonteaching career training offered. A list of 24 career possibilities is appended, and the colleges and universities offering courses necessary to obtain such jobs are cited. (JD)

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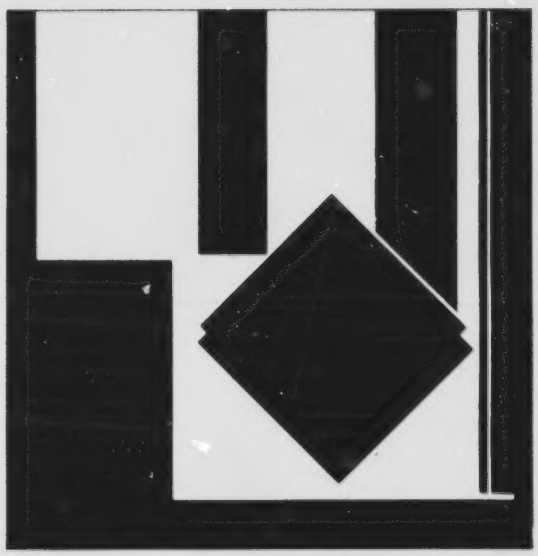
ALTERNATIVE PROFESSIONAL PREPARATION IN PHYSICAL EDUCATION

NASPE COLLEGE AND UNIVERSITY COUNCIL
William J. Considine, Editor



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FOREWORD

A major responsibility of the College and University Physical Education Council of the National Association for Sport and Physical Education is to give leadership to physical education professional preparation programs. Recently many colleges and universities have responded to the decreasing job market for teachers by expanding the options available within undergraduate professional preparation programs. The College Council determined that NASPE should assume an active role in examining these new program options and the issues inherent in their implementation.

A Task Force on New Options in Undergraduate Professional Preparation was appointed in January, 1977. The Task Force was comprised of two sub-committees, each of which addressed different aspects of the topic. Committee A was asked to identify the types of options currently offered by colleges and universities throughout the country. Committee B was asked to investigate procedures which would be useful in advising or selecting prospective students into the appropriate career option. Both groups were to identify issues and concerns relating to the implementation of new options in undergraduate physical education.

The College Council determined that the information generated by the Task Force would be disseminated through a conference on non-teaching options and a publication of the proceedings of that conference. Each college and university with an undergraduate physical education major would be invited to send a representative to the conference and a limited number of other participants would be included. A Conference Planning Committee and a Publication Committee were appointed to implement these plans. This publication is the culmination of the efforts of the Task Force, the planning committees, and the conference program participants. The NASPE College and University Physical Education Council wishes to express its gratitude for their contributions.

Linda L. Bain
Chairperson, NASPE College Council

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IN
UNDERGRADUATE PROFESSIONAL PREPARATION

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INTRODUCTION

Among the conferences sponsored by the National Association for Sport and Physical Education, the interest in alternatives to professional teacher preparation in physical education generated considerable attention. The Planning Committee for the "Non-Teaching Options in Physical Education" Conference held in April, 1978, aimed to provide participants from higher education institutions offering physical education preparation programs, information concerning pre-professional programs in physical education as alternatives to teacher preparation programs; and also, guidelines for advising, selecting and retaining students in these non-teaching pre-professional programs. Further, the Committee planned for issues to be considered at the Conference which would magnify potential ramifications and responsibilities involved in the redirecting and/or extention of existing professional preparation programs.

The intent of inviting a departmentally designated delegate from each higher education institution was to gather those persons who had major responsibility for college programs in physical education. The Planning Committee wished to maintain a reasonable sized group, while providing for the presence of those persons who were most instrumental to curricular administration in their respective institutions.

The format of this conference was organized to be informative, although informal interaction among participants was encouraged. Successive conferences were expected to be planned in which professional standards for non-teaching options might be initiated and activated through conference participant interaction.

Organization and Conduct of the Program Content

The Sub-Committee Chairpersons of the NASPE Task Force on New Options in Undergraduate Professional Preparation were charged by the Planning Committee to select and secure representative speakers to present prototypes of non-teaching programs, and to exemplify evaluation procedures for consideration in utilizing non-teaching programs. The Planning Committee, as a whole, identified pertinent "Issues" and selected speakers to address those topics.

The Conference was publicized for a six month period prior to the event via JOPER and UPDATE, and through mailings to departmental chairpersons. Delegates who were elected by their respective chairpersons were encouraged to pre-register. Several professionals were registered as at - large participants when their request for involvement with the Conference was supplementary to the designated delegate from the same institution.

The program addressed three major directions. Prototypes of non-teaching programs constituted the main emphasis of the first two sessions. "Evaluation" processes in non-teaching programs were presented during the following session, and the concluding session considered underlying "Issues" surrounding the emergence of professional preparation programs for physical education careers other than teaching.

Recommendation for Use of this Publication

The 1978 NASPE Conference on Non-Teaching Options in Physical Education has recognized a new professional preparation horizon. Selected presentations at the conference were solicited for this publication and are the collection of insights and experiments of future sighted professionals into expanding career opportunities through sport and physical education. The prototypes of non-teaching programs are exemplified as a spark for new ideas and appropriate innovations in other more traditional programs. The prototypes included do not begin to represent the diversity that is necessary to prepare professionals for an expanding exercise-leisure career field through sport and physical education. But the birth and growth of non-teaching physical education programs in higher education must not be allowed to multiply unchecked by professionals in the field, and herein lies the usefulness of the evaluation processes for programs contained in this publication.

Whenever change occurs, friction and conflict is likely, and is best anticipated to ward off disastrous effects. Thus, the projections of the professionals who speak to the "issues" involved with initiating and expanding non-teaching programs in sport and physical education are quite valuable in alerting program administrators of extenuating factors which may jeopardize a department's development of a new program.

Selected presentations have been published here from the program of this conference on Non-Teaching Options in Physical Education. This resulting publication serves as a report of the pioneering effort at organizing a changing professional preparation direction in physical education.

L. Marlene Mawson
Conference Committee Chair

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SECTION I. A BROAD LOOK AT THE ISSUES

1. Responding to Crisis

L. Marlene Mawson
University of Kansas, Lawrence

Physical education departments in higher education have traditionally prepared teachers for elementary and secondary schools, and in instances where graduate level course work was offered, physical education departments typically have provided preparatory programs for teaching and/or research in higher education physical education departments. Prior to the present decade the need for teachers exceeded the supply, and physical education departments in higher education were unconcerned with providing more than teacher preparation programs for students interested in teaching careers. The reality of the contemporary job market for teaching positions reveals that the previous slack of prepared teachers for physical education has now vanished. Today's graduates aspiring to be physical educators in schools have been forced to alter their career goals. Meanwhile, the growth of exercise-leisure related opportunities for careers has mushroomed, and although some physical education graduates with teaching degrees have managed to enter a post-college career in a related field, there remains a preparation deficit of knowledge and experience for the specific requirements of the tasks inherent in these different positions. Many applicants in non-teaching exercise-leisure job markets seldom have the same credentials as the teacher-certified physical education graduate. Although the physical education graduate usually has gained a basic exercise-activities background important for the exercise-leisure positions, in most cases the theoretical background so vital to the business world is absent. When there has been college coursework and experiences available in exercise-leisure for business related fields, this coursework has been elective for the physical education student and not creditable toward completion of the college degree in physical education.

This gap between the knowledges, skills, and abilities necessary for competency in an expanded exercise-leisure career area in the business world, and the traditional teacher preparation programs in physical education was central to the content of this publication. Ideas for new college programs, expecially designed to provide professional preparation for non-teaching vocations in sport and physical education, were of primary consideration.

The initial stages of program restructuring and/or expansion have already begun across the country with little attempt at unilateral agreement on professional standards for quality or direction. It was the intent that this maverick growth be identified and unified through the consensus of representative NASPE membership.

An Overview of the Basic Approaches

The prototypes of alternative options to teaching physical education which are presented in this publication are from a liberal arts approach and from a vocational approach. Each are reviewed briefly here but are described in detail in subsequent chapters. The programs presented are not intended as models or as the extent of the variety of alternative programs to teacher preparation being offered in physical education presently, but they serve as examples of programs that do exist and are recognized by students seeking new options in physical education.

These prototypes offer only a minute portion of possible college preparation programs for the world of sport-related careers in business, sports medicine and sport in the arts and in architecture, politics, religion, law, industry, and many other areas, and theextent of what possibilities there are in alternatives to teaching sport in physical education classes, begins to come into perspective.

The Liberal Arts Approach

Three institutions have utilized the "liberal arts" concept of curricular programs which provide for the study of physical activity without pursuing a teacher certification degree program. None of these programs offer the student the same preparatory background; however, the programs have several commonalities.

All of the "liberal arts" based programs described here are kinesiologically based. Rutgers College offers a degree program called "Human Kinetics," The University of Washington's major is "Kinesiology," and "Kinesiological Sciences" is the name the University of Maryland has elected to call their new program. These Liberal Arts programs are of recent origin. They range from one to seven years in operation. All three of the liberal arts programs described are based upon a core of courses offered within physical education, and provide for the election of courses in specialized options, commensurate with the career interest of the student. All have similar career opportunities toward which they advise the student in his professional preparation.

The uniqueness of each of the liberal arts programs provides the kind of diversity to which the unconventional student is attracted. The Human Kinetics major at Rutgers enrolls in the School of Liberal Arts and takes academic physical education core courses in biomechanics, motor learning, exercise physiology, and assessment of motor performance, supplemented by liberal arts courses contributing to a selected option such as sport administration, sport communication, pre-physical therapy, research in kinetics, or even an option of teacher certification.

At the University of Washington, the Kinesiology major program is theoretically oriented, as opposed to the usual occupationally oriented

perspective of traditional physical education programs. With a foundational base of performance laboratories, kinesiology majors enroll in core physical education academic courses prior to taking upper division undergraduate coursework which provide knowledges and understandings, but without application. Kinesiology as a subject field is divided for junior-senior majors into motor control, biomechanics/biodynamics, and sport studies. Each area also includes corallary courses from liberal arts which specifically relate to knowledges pursued through physical education courses within each of the three areas. The Kinesiology major is designed to offer the student comprehensive knowledge and understanding of physical activity in the American culture. Pre-professional experience in a career environment is offered as the culminating experience in the major, and the kinesiology major may enter a variety of occupational careers in any one of the three specialties pursued in the degree program of which teaching is still one.

The Kinesiological Sciences major at Maryland is designed to prepare students for understanding human movement as a "discipline" which is greater than the traditional teacher preparation program in physical education. The student elects approximately half of the degree program from liberal arts courses. These electives are categorized into general electives, free electives, and restrictive electives in liberal arts. General electives include the familiar biological/physical sciences, the social/behavioral sciences, and arts and humanities courses which are required on most campuses. The free electives are taken from three of five divisions within the University, and may include activity courses in physical education. Restrictive electives are specific liberal arts coursse selected because they are related to two of seven speciality areas identified for majors. The remainder of the coursework for the degree is required of all kinesiological science majors and the majority of this coursework is offered in physical education. This major is concluded with a seminar paper in which each student analyzes a special project in depth, rather than assigned a pre-professional applied experience as other more traditional teacher preparation programs currently do.

Specific Vocational Programs

Exercise directors, sport management and sports promotion personnel represent a variety of opportunities offered to college physical education students through special vocational degree programs. Two curricular programs are presented here which prepare exercise program leaders, both of which base their programs on a physical education core of coursework, Likewise, the Sports Communicatinn major which is explained, also utilizes the physical education core with the addition of specialized coursework from other college departments appropriate to the specialty. However, one vocational career opportunity presented is derived from a school of business, and conversely, uses courses from physical education for the program specialization necessary to sport management in business.

As early as seven years ago, the Physical Education Department at

California State University at Long Beach responded to the National YMCA to prepare professional directors of physical fitness centers. As a result, CSU-LB is currently a training site for YMCA Physical Fitness Directors. The program requirements are identical to the teacher-preparation program for physical education majors with the exception of the education element. In its place is a community physical fitness course series. Additional courses outside physical education are from recreation, communications and business areas. Field work is completed during the final semester. This degree program leads to certification in Community Physical Fitness and career opportunities such as managers or directors of health spas and health clubs.

A year-old program designed to prepare health spa and health club directors is a Commercial Physical Education degree offered at the University of Utah. Besides completing the physical education core requirements of all physical education majors, the Commercial Physical Education major enrolls in courses in finance, management and marketing.

Among the business majors at Ferris State College in Big Rapids, Michigan are selected students admitted to the Golf Management Program which is accredited by the Professional Golfer's Association of America. The graduate of this program is a golf professional who may instruct, manage golf facilities, or operate golf shops. The year-round curriculum was developed in 1975 and takes five years to complete because students compile points to achieve membership in the P.G.A., as well as earn a marketing degree in the School of Business. The business program for the golf management major includes physical education and recreation courses. Each major in golf management is assigned two out-of-state internships during the last year in the program.

Sports Broadcasting, Sports Writing, Sports Photography, and Sports Information are possible alternatives for Sports Communication majors in the Oregon State University campus. Majors take the physical education core of courses and add specialized courses from speech, journalism, visual arts business, and public relations which relate to their chosen specialty in sports communications.

Most of the approaches to providing curricular programs in physical education as alternatives to teaching, seem to have a central characteristic in common. All of these prototypes of programs have widened the opportunities of physical education students by broadening the offerings or reorganizing an existing physical education program. Each have redirected the traditionally required educational emphasis to focus on other vocational specialties without forfeiting the central discipline of physical education.

An Overview of the Issues

The idealistic formulation of new programs present accompanying concerns which must be addressed. Three major issues confront physical education professionals who are proposing new alternative programs to

teacher preparation in physical education.

The most immediate question to be answered regards the legitimate domain of physical education among other academic disciplines. The desire to overlap into other professional fields under the guise of interdisciplinary study needs diplomatic attention, in order to avoid confrontation with other departments due to misinterpretation of the intent of the proposed alternative program in physical education. The professional and ethical procedures followed by curriculum constructors may well mean the difference between a supported or an undermined program. Administrative communication must be within the department or school, as well as between the department and other academic disciplines.

Another issue that demands considerable attention is quality control of new alternative programs in physical education. It may be relatively easy to let the excitement of an expanded major cover the concern for quality courses and qualified faculty that dictate the eventual success or failure of the new program. Before the impact of new programs with options in physical education mushrooms, professionals have an opportunity to set guidelines and standards for quality programs. The problem is not really one of, "shall there be standards," as much as "what shall be the standards?"

The final issue, but perhaps the most crucial in final analysis, is the potential of the job market for graduates of these new programs. There is little question that many jobs are available in exercise-leisure related occupations. The unanswered questions are, first, would the employers of these positions prefer candidates with specialized college degrees for those jobs? And second, are there potential students who are interested in preparing for an exercise-leisure professional career through the kinds of alternative programs now being proposed to be offered in physical education?

These issues have been considered by specialists in this publication. The answers given certainly are not exclusive, but serve to provide professionals in physical education a framework within which the obstacles considered here as issues, may be confronted.

2. The Status of Non-teaching Options in Physical Education

Jim Ewers
University of Utah

Non-teaching options in undergraduate physical education are certainly not new to the field of physical education but they have taken on a fairly high degree of relevance in the past three or four years. We can speculate why these non-teaching career preparation programs have become so prominent throughout the country but the primary reason is simple. Those of us teaching in the colleges and universitites throughout the country want to keep our jobs. We may have one of the most exciting and appealing programs within the colleges but if we don't have students we don't have jobs. If our students can't get jobs after pursuing a major in physical education, we won't have students.

This author can recall discussions at our professional meetings 6 - 8 years ago when the over supply of teachers in physical education was quite evident. Many of our colleagues were boasting that this was just what our profession needed. Now we could select just those highly qualified major students and stress "quality" in our selection process for professional teacher preparation programs. This was certainly a commendable position and fits into the philosophy of most professional schools. However, the one factor that was difficult to deal with was when the reduction of students was invoked, the Deans, Vice Presidents, Presidents, and Boards of Regents also decided that a reduction in teaching staff was the logical decision. University administrators have been forced by Boards of Regents and State Legislatures to reduce the total operation to bare minimums and any indication of student enrollment decline was the first place that "cuts" were made. If departments were to retain their teaching staff program changes were inevitable.

There are many reasons to focus attention upon non-teaching options in undergraduate physical education other than to save your job or the jobs of your professional colleagues. It is a recognized fact, however, that the future of physical education professional preparation cannot continue to depend solely on the pre-professional preparation of teachers for the public schools. Many institutions have moved into the in-service types of programs to continue their impact on school programs. Other colleges and universities are looking at the possibilities for non-teaching options.

NASPE Study and Task Force Assignment

As THE COLLEGE COUNCIL of NASPE attempted to study this dimension that was getting so much attention, those of us involved tried to ask ourselves one basic question, "What can be done that would be most helpful to those ad hoc committees or curriculum committees concerned with the non-

teaching alternatives?" It was decided that our best approach would be to contact those personnel in the field who have been willing to try a non-teaching alternative and find out what is happening.

We are all aware of the conferences, workshops, meetings and discussions that have been held on the topic of new options, alternative careers, etc. Most meetings and publications have focused more on the philosophical discussions, positions as an academic discipline and as a profession, trends in the job market, our responsibility outside of teaching in the public schools, accounts of our graduates finding jobs in numerous professions outside of teaching, and reports that a new non-teaching option has just been approved for adoption. Very few presentations have described programs that have had a substantial "trial" period worthy of evaluation.

Our committee of NASPE undertook the following:

1. to define and categorize non-teaching options. (what is specifically a non-teaching option?)

2. to identify as many colleges and universities as possible that have developed new options in undergraduate physical education.

3. to request information from those colleges and universities involved with new options.

4. to review the information received and identify a variety of programs that might be used as prototypes or model non-teaching option programs.

5. to request a faculty member from the respective institution to present the program at a conference planned in conjunction with AAHPER convention in Kansas City in April, 1978.

6. to publish the outcomes of this conference illustrating the specific option programs which may serve as models for future program development. We began work over one year ago. Our first job was to try and determine what information we actually wanted to get. Once that was decided we drafted a questionnaire which we thought would give us the most pertinent information.

Our next job was to try to locate as many non-teaching options as possible that were in existence in colleges and universities throughout the country. We contacted at least one university in each state and in some states two or more institutions were contacted. Following the mailings of some 82 questionnaires we had 65 responses for an 80% return. A list of the universities responding to the questionnaire is included in Table I., Appendix A.

Findings

1. The list of non-teaching physical education options was quite extensive. (see Table II, Appendix A)

2. Out of 65 institutions reporting, only 12 schools have non-teaching option programs that have been in existence more than 4 years. These include Brigham Young University, Delaware, Illinois- Chicago, Wyoming, California State-Long Beac h, Oregon State, West Virginia, Springfield, Connecticut, Hawaii, Maryland, and University of Utah.

3. Excluding 50 graduates placed in various employment roles from the University of Illinois - Chicago General program, only 123 graduates from all other programs were accounted for.

4. The liberal education or general education approach is the most prominent development in non-teaching options in undergraduate physical education. (see Table III, Appendix A.)

5. The "ad hoc" curriculum or specific job market approach to non-teaching options is dependent upon 1) institutional philosophy, 2) job market in geographical area, 3) faculty expertise, and 4) ability for interdisciplinary programming. Universities listing prototype programs are included in Tables IV - IX, Appendix A.

SUMMARY

The following comments may be appropriate directives to curriculum committees planning non-teaching options in undergraduate physical education.

1. The job market needs to be developed. Although there is the potential for numerous jobs. The present openings in non-teaching physical education related jobs are limited. The market needs to be explored.

2. The number of students that will pursue non-teaching options may be rather small because of (1) salaries, (2) working hours, and (3) limited job opportunities.

3. Develop non-teaching options with care. If a large series of options are developed, small class enrollments might result which are not economically feasible.

4. Be sure that the goals and purposes of the College or University are compatible with non-teaching options.

3. The Legitimate Domain of Physical Education and Internal Public Relations Among Other Institutional Programs

Madge Phillips
University of Tennessee, Knoxville

Introduction

The term "Non-teaching Options in Physical Education", suggests to this writer a striking resemblance to the title of an article by the British poet Stephen Spendor, "The Connecting Imagination." Spendor was discussing the realities of the separation of the private world of the individual from the public world of the individual and the necessity for bridging the gulf between the two in our imagination. We suggested that the bridges which cross the gulf of the interior and exterior worlds can be made by those who have the ability to imagine creative ways to see the relationships between the two and to see that these connections are in fact an acknowledgement that both are important. For years several members of AAHPER have been aware that it was possible to do more than to teach physical education and in the same breath or at the same time and with equal enthusiasm that teaching was, is, and will continue to be an essential part of physical education. This awareness may be the connecting imagination which will enable us to appreciate the importance of, and need for, options in physical education. It is my preference to say options in physical education as opposed to non-teaching options.

The purpose of this paper is to address the issues related to programs which are related to our legitimate domain within the academic community and our working relationships with other academic units. In focusing on these issues an attempt will be made to be practical, realistic, and optimistic. In looking at any curricular problem or issue in higher education, it is believed to be safe to say that academicians often agree in principle but disagree when discussing particulars. My remarks will be organized around three main topics with a deliberate attempt to see relationships existing between and among the three artificial sections of the discussion which are 1) My biases, 2) General assumptions, and 3) Issues which have been subdivided into issues within physical education departments and issues in working with other academic units.

Bias

"Where are you coming from?" seems to be a question which faces us each time we meet with a new group, a new committee, a department head from another department, a new class, colleagues from other departments and universities, and administrators with whom we work on a daily basis. As an administrator of a School of HPER, a physical educator with a liberal arts

background who has taught in four large universities with recognized physical education programs, this writer has beliefs which could be considered as biased positions. Those which relate to issues associated with physical education options will quickly be identified.

1. The Whole Person - A Holistic Perspective

Regardless of courses taken or taught, materials read or written, there appears to be a persistent idea, concept or theme which is reoccurring and which seems to be basic or to have priority in my value system. The term "the whole person" is often viewed as being trite, sentimental, fuzzy, or educational jargon but among beliefs it is the cornerstone of my biased approach to education and therefore to curricular issues. The term suggests inclusiveness, comprehensiveness, wholeness, broadness, integrity, universality, and completeness. Unfortunately this author never had the opportunity to study with Dr. Delbert Oberteuffer but having read his writings many times, two quotes from his works seem appropriate. The first was written in 1951 and was included in The Ohio State University Graduate School Record in an article, "The Study of Man as an Entity."

> Our great need today is for scholars who are wholly informed, who seek to synthesize knowledge from segmented specialities in order to bring it to bear upon man as a living whole. We need professors who are less inclined to retain their "academic" prejudices, less inclined to worship the old dichotomies of mind-body, arts-science, academic-non-academic, intellectual-physical, or theoretical-pragmatic. We need chemists who respect sociologists, physicists who are interested in education, educationists who will learn from the physiologists and the humanists alike. We need scholars inclined to see man as a totallty and not merely as a creature to be analyzed from one viewpoint alone. We need maturity not s sophistry, breadth not provincialism, in all our fields of learning. Under these improved conditions we could direct the power of our University toward. . . . the study of the human being as a whole. We could offer the world a university of scholars living in mutual respect because each would demand of the other not isolated contributions but, in addition, a demonstration of a willingness to seek an interpretation of the relation of such contributions to the integrated life.

The second quote is from a paper delivered to Australian physical educators in 1968.

> The person cannot be divided, is not divided, and no matter what fiction we may concoct about mind and body, physical and mental, academic and nonacademic, these dichotomies bear no relation in fact to the essential nature of the person. The fact is that the person is a whole, is one, a psychophysical organism capable of reacting in many ways to the many and various emphases of stimuli to which one is exposed in the course of a lifetime. The root of this wholeness is the cell. Its metabolism, its activity, its quality determine the expression of the organism that is made up of these millions of cells.

A very important new book, Investment in Learning: The Individual and Social Value of American Higher Education, by Howard Bowen and issued by the Carnegie Council on Policy Studies in Higher Education, provides an excellent review of the goal literature in higher education. Dr. Bowen is a distinguished American educator, economist, researcher, scholar, former Dean of the Business School of Illinois University, President of Grinnell College, University of Iowa and Claremont University Center. I worked with Dr. Bowen at Grinnell College for six years and can attest to the fact that he is not a sentimental educator. According to Bowen, no theme in the goal literature is more consistent or is discussed more frequently than that of the whole person. Almost every study reviewed by Bowen emphasized that the goals of instruction transcend intellectual development, though many refer to a close interrelation between the affective side of human personality and academic learning. One quote by Alexander Heard (1973) from "The Modern Culture of Higher Education: Many Missions and Nothing Sacred."

> Our first concern is the human intellect, but our ultimate concern is the human being . . . The institution that can help its students become a better-integrated person, with a sense of command over his own destiny and a sense of how he fits into his complicated and mercurial social environment, will have acheived the most demanding and significant educational objective of our time . . . Out largest common goal in higher education, indeed in all education, is to create and stimulate the kind of learning that breeds strength and humor and hope within a person, and that helps build a society outside him that stirs his pride and commands his affection.

A third source supporting my biased position for a broad coverage or of synthesis is that of Ginny Studer in her article, "Synthesis and Coalescence in Physical Education: A View Toward the Future" but this source will be presented later under Issues.

This first biased position is at least a popular one.

2. Cooperation is Better Than Competition

As enrollments stabilize and as academic dollars are more difficult to come by or to obtain, it is this writer's belief that we should take advantage of what other units have to offer as well as trying to add new courses and new faculty. We could take the initiative in establishing relationships with other departments and of showing a genuine interest in utilizing or maximizing the resources of the college or university.

A new book, Missions of the College Curriculum, which is a commentary of the Carnegie Foundation for the Advancement of Teaching provides us with a wealth of data which enables us to appreciate the magnitude of facts accumulated in institutions of higher education. The following quote suggests to me that we need to cooperate with departments and in so doing we could contribute to the solution of our immediate concern for new faculty.

> In 1969, 20 percent of the faculty members in the United States were teaching in the humanities, although these subjects claimed only 9 percent of the undergraduates as majors. By 1976, the proportion of faculty members teaching in the humanities dropped to 19 percent, but relative to enrollments this level is still high. Instruction in the humanities appears to be expensive for colleges, particularly in comparison to the professions, which have 58 percent of the majors and 37 percent of the faculty. Instruction in the humanities has always been "labor" intensive." One reason is that these disciplines have always been the providers of service courses for majors in other disciplines and of stable components of general education. Another reason is that they cover a large domain - the history, thought, and literature of the past and present in many cultures and many lands. And finally, the number of faculty members in the humanities may not have dropped proportionately because of tenure and other personnel considerations. By contrast, the professional school enrollments are rising and the number of faculty has not caught up.

Many physical education departments could justify new faculty positions but there are times when we could take the initiative in suggesting that faculty members in other departments could teach courses for us. An attitude of cooperation within the college or university with deans and departments heads in other schools and colleges is, in my opinion, worth serious consideration. In essence we are all competing for the same academic dollar instead of cooperating with the units which already have the faculty which may welcome an opportunity to develop new courses for our new programs or options.

3. Abundance or there are so many career possibilities and so many people to be served that there should be positions for all who wish to enter the physical education profession. For those who have read The Human Agenda, you will recognize by stressing cooperation and abundance this author's position has agreed with the thesis of this fascinating book. According to Gorney, we are now in the midst of man's most momentous evolutionary leap, the transition from the era of scarcity to the era of abundance. He therefore urges that the next item on the human agenda is how to live without panic in a world of peace and plenty. In my opinion, we have been so conditioned to competition and scarcity that we have not acknowledged that we could change our focus and concentrate on new ways of looking at what is possible as opposed to what is impossible. For example, there appear to be many career alternatives for those interested in physical education. If we believe that activity, exercise, movement, motor behavior, play, and sport are important for all people then we have unlimited opportunities to share our information and to deliver our services to a multitude of publics. Now more than ever we could be able to accommodate those with different specialities, interests, skills, and professional goals. In essence, there should be ample opportunity for all who have a genuine interest in our field be it student or teacher.

4. Physical Education Majors Have a Liberal Arts Background or another way of saying this is that a student in physical education has the potential for being liberally educated even if he or she studies at a state university or a small state college. If distribution requirements could be met by having had integrated learning experiences in the physical education mini-university, it is conceivable that a physical education major could take all course work within the department and have been exposed to the broad areas of study. Physical education departments include history, philosophy, biology, chemistry, physics, physiology, sociology, psychology, art and statistics. Many critics have indicated that we are trying to be an island unto ourselves. We should not be an island or isolated unit in "the building" but we should cooperate with existing departments and encourage our students to explore what the college or university has to offer. Because of the nature of physical education, major students will be liberally educated. Many of us and many of our colleagues have overlooked this fact.

5. Our "stock-in-trade" is physical activity, human movement, motor performance, exercise, play, and sport. My bias here is that we must recognize that the ingredient or substance or "IT" is a phenomenon which has existed as long as the human being has existed. We need to know about "IT", research "IT", appreciate "IT", understand all those who experience "IT", and be able to deliver "IT" to a variety of publics.

It is doubted very much if any of these biases are terribly unique among physical educators.

General Assumptions

1. Most of us have read the professional literature and have our own definition of what physical education is. Therefore, effort will not be spent on definitional endeavors.

2. A second assumption is that we have read recent as well as historical professional literature.

3. It is also assumed that we will acknowledge that physical education is both a discipline and a profession. Larry Locke's paper, which was presented at the 1977 NAPECW/NCPEAM National Conference, should be required reading for all physical education faculty and students. "From Research and the Disciplines to Practice and the Profession: One More Time" identifies the struggle between the new disciplinarians and the professionals as a divisive conflict or contest which has" . . . separated nearly everyone in college physical education into groups of conflicting loyalty and sometimes into hostile camps. This has been the saddest kind of all human dissensions, a cruel strife that pits colleagues against colleagues. It has not been just a paper war. For some of the action has been real and the losses genuine. In colleges, in professional organizations, and in our hearts, physical education stands a house divided. A truce? By all means let us try! This insane struggle to capture the profession may pull us all down. But let us not have peace at any cost. Having come this far, the armistice must be equitable. We must take into account what each side has won. A Treaty of Versailles here, a false victory for one with unreasonable terms for the other, would serve only to infect another generation with our plague."

The final paragraph, "If either side truly wins, all of us will truly lose. The conclusion is inescapable. We do need an armistice in which each side is granted that it has truly won. A little peace, please, in which we can learn to do work better."

It is assumed that there are many who have called for such an armistice. Recent conferences and programs attest to the idea that the profession is supportive of the armistice concept.

4. The next assumption could be classified as a truism for any who have been on a curriculum committee. A physical education curriculum has been always and always will be influx, but more at some times than at others. Basic conflicts or " eternal points of ension " exist not only in physical education but in higher education cu: .culums in general.

A quote from Missions of the College Curriculum:

> There are eternal points of tension: scholarship versus training; attention more to the past or to the present or to the future; integration versus fragmentation; socialization into the culture versus allientation from the culture; student choice versus institutional requirements; breadth versus depth; skills versus understanding versus personal interests; theory versus practice; ethical commitment versus ethical neutrality; among others. These conflicts are temporarily adjusted now one way and now another; but they never cease. There are no easy permanent solutions.

A recent edition of Saturday Review featured curriculum revision at Harvard and indicated that Harvard is higher education's weather vane. Campuses across the country are searching for ways to shape and reshape curriculum. Fortunately, in my opinion, physical education is part of the mainstream of higher education and is also involved in curriculum reform.

5. Historically major curriculum changes took place when higher education enrollments were starting their historic expansion and second, when they begain to approach a steady state. Growth permitted specialization and the fear of a steady-state encouraged a market orientation. Perhaps this writer is being either naive or idealistic or both, but my contention is that physical education was looking at establishing academic credability or acceptance and becoming specialized during this second stage when other departments were looking at marketability and that we are behind other departments in considering alternative careers. The assumption would like to be made that we are not establishing new programs or options in order to maintain faculty positions during a steady-state or cut-back period. Not many departments examined programs in order to drop requirements as carefully or as frequently as did physical education departments. In all honesty, it could be assumed that requirements were eliminated for the " right" reasons and that new programs are being considered because of a genuine belief that physical education has something to offer to more than students in K-12 and in colleges and universities.

6. A final assumption is that physical education options do not imply a divorce or splitting syndrome but does imply that a person who studies physical education can actually do more than teach it. Our sense of history or continuity provides countless examples of various uses to which physical education has been put. This writer would like to think that we can now say that it is not German or Swedish gymnastics, not education of or through the physical, not is fitness our most important objective, not recreation or education, not profession or discipline but simply acknowledge that physical education is so basic that it is important to all human beings. Forms, processes, levels, emphases, administrative situations will vary but the thinking-feeling-moving person has had basically the same physical structure and basic sociological and psychological needs for a long period of time and it is anticipated that the biped position will be with us for at least as long as most of us will be alive.

Issues - Within Physical Education Departments or Units

A number of issues related to the legitimate domain of physical education and internal public relations among other institutional programs were eluded to under BIAS and GENERAL ASSUMPTIONS. As indicated previously, further development of this paper will examine issues which are most likely to occur within the physical education department or unit and will identify issues which are campus, college, or university based.

1. Adequacy of Existing Goals

Ann Jewett spoke to this issue in the opening session address at the 1977 NAPECW/NCPEAM National Conference. Her remarks in Orlando might very well have provided the rationale for a non-teaching option conference.

> I suggest that rather than asking how we can achieve concensus on our professional goals, we should be asking whether our professional goals are broad enough and appropriately diverse. Many respected leaders have warned us that physical education cannot be all things to all people; I believe that this message has come clearly through the last few generations of professional preparation. On the other hand, physical education must be different things to different persons. It does, in fact, have the responsibility to serve all of the people, and it can effectively serve all only if different persons are served in diverse ways appropriate to their unique personal needs . . . We must now commit ourselves to a spirit of global community; of planned interdependence and dynamic reciprocity; extend our vision; and live up to our opportunities for leadership and for service.

There is a need for a shift in thinking from "no, we cannot be all things to all people" to "yes, we do have something to offer to everybody."

Physical education options do not change the nature of what physical education is or could be but do drastically change the emphasis of our delivery system and the various publics which we service. Many physical education major courses do specifically relate to the teaching function only and therefore there is the very real possibility that such courses would be excluded from the physical education "core" requirements and be required of only those wishing teaching certification. If all aspects of pedagogy were "teased out" of existing courses, major curricular revisions would be essential for many and probably most physical education departments. The main issue here is that the thought of examining and re-writing goals and of a major curricular revision could be a deterrent to considering a program designed to accommodate new options.

2. Fragmentation - Synthesis

There are physical educators who fear that physical education options programs will encourage fragmentation and interfere with recent efforts to work for synthesis. Studer's article, "Synthesis and Coalescence" suggests that the opposite is a possibility.

> At present, our professional organization reflects that principles of separatism, specialization, and hierarchy, As a result the field is fraught with dichotomies, fragmentation, and duplication. We have sport sociologists, and dance historicans, kinesiologists and philosophers, men and women, amateurs and professionals, coaches and teachers, performance teachers and theory teachers, humanistic psychologists and behavioristic psychologists of sport, researchers and scholars, and so on.
>
> At the present time some attempts have been made to review those principles that have segmented us. Differences of degree rather than kind do not necessitate categories of distinction and elitism, but rather may provide the basis for a blend of similarities. The future may extend the process beyond the merger of men's and women's groups to a total reexamination of professional organization. Present distinctions may be extinguished by the acceptance of a common goal. One possible goal may be human service, which is what all individuals and groups may be involved in with reference to vocational-life studies. Such a coalescence of professional organization may be generated by the synthesis of the body of knowledge of human identity.

As we explore physical education options we are encouraged to synthesize our content material, bring our 'body of knowledge" into focus, stress the integrative aspects of our discipline, and at the same time, focus on the service component for all constituents or consumers. Actually, those who fear fragmentation may in fact be unconsciously contributing to it. Those who have attempted to work for synthesis and coalescence have been in a minority but the number are increasing. This issue is definitely an "in-house" one. The physical education option thrust will contribute to the solution of fragmentation.

3. Related Areas of Recreation and Health

Both of these areas have worked diligently to be accepted as a discipline/profession in their own right. At one time distinction between recreation and physical education was the absence of educat ion requirements for recreation majors. Recreation departments now provide options for students and recreation education is one of these options. Health departments include numerous options including health education and community and patient education. For these colleges and universities which include these three disciplines in one department, the problems of issues associated with developing physical education options do not appear to be as much of an issue as is the case when there are free standing departments. But in both administrative plans there is the very real possiblity that those in recreation and health will ask difficult questions. The importance of using existing courses and of working cooperatively with other departments is essential and especially so with health and recreation. Let us not compete with our allies. An attitude of alliance could be essential in eliminating this issue.

Issues - Colleges, Campus, or University Based

1. Territoriality

As we make plans to provide new options and subsequent contacts are made with new departments, the issue of protection of turfdom or invasion of territory will be sure to surface. However, in the final analysis other departments will welcome the opportunity to work with us and be willing to support these programs. If our attitude reflects a desire to cooperate instead of to compete, turfdom becomes inconsequential. It only seems to become an issue if we assume to profess to be qualified to cover specialized courses without providing sufficient evidence to document such claims.

According to Saeger (1976) there has been a history of resistance to change and/or invasion of traditional imperatives. "But today, in a knowledge-expanding and interacting global village where no discipline has all the questions or answers, some faculty and administrators are seeking a fresh image of the processes of learning. "

2. Using Correct Terminology with Colleagues and Administrators

We need to be extremely careful to have those outside physical education understand specifically what we are planning to do. If the program is interdisciplinary then it should meet the criteria established by that institution for interdisciplinary programs. If it is a joint program with another department, this should be understood by both department faculties and students. Is it a new major or a new option? or a new emphasis or a new concentration? Those who have read "How to Kill a College" may have thought that the reaction to the term "studies" was too strong or even reactionary. The point was made that American education is integrative and that subject matter cannot be assigned to the various "studies" which were created in the late Sixties.

> The appropriation of knowledge for some personal need is one reality. That is the reason most of us have for learning anything. But to use knowledge solely to further a cause will ultimately debase the knowledge because it is being manipulated for a narrow purpose. The student is allowed to evade personal responsibility and unique humanity for an abstraction that has an absolute quality and a finality; the student's use of his knowledge is too predictable, too tendentious.
>
> It is insufficient to claim - as defenders of these programs do - that a college teaches students, not subject matter, and that therefore students should explore what they wish, however they wish. This is a sentimental argument, so relativistic and shifting that it blurs an essential education vision that judges priorities, that sets forth objectives and skills, that knows its own inherent meaning. It offers the students themselves - no more, no less. It offers no leadership. It points in no direction.

Obviously the word "studies" is a perfectly acceptable word for such areas as sports and leisure - - or is it? If we do decide to use the term, it would be important to explain the term so that those who perceive it negatively would realize that it is synonomous with the studies programs which were developed in defense to social issues, i.e. black studies, Asian studies, Indian studies, women's studies.

3. Issues Associated with Being Housed Administratively in a College of Education

For those physical education departments which are in a College of Education, there could be a problem of convincing the dean and faculty that non-teaching options are consistent with the goals of the College. The

problem becomes one of either modifying the goals of the College or of preparing a different administrative structure. In both cases the need for open communication is essential. The particulars are so related to the local situation that my attempt to suggest possible solutions would be presumptious.

We should take pride in the significant steps which have been taken by so many colleges and universities to establish new physical education options. The issues which are related to the "territorial imperative syndrome" or Ardrey's African Genesis, Territorial Imperative, or Social Contract are real, but it is time to accept the model of the Human Agenda which is positive and makes us aware that by cooperating we can co-exist in the academic arena and adjust to the idea of abundance.

The issue or problems are inconsequential when weighed against the potential of doing what many of you are doing and what others hope to do.

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4. Meeting the Challenges of Expanding Options in Undergraduate Professional Preparation Programs

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Who can jump and touch the net on the basket? Who can dribble a ball with your left hand? Who can walk a balance beam backwards? Liselott Diem's little book Who Can (1957) taught us all the fascination of challenges. The purpose of this paper is to discuss the challenges which face us as we attempt to envision undergraduate physical education programs as something more than teacher preparation.

What are these challenges we need to meet? This writer proposes that there are several and that they are hierarchical in nature. Many readers are probably familiar with Maslow's hierarchy of human needs. (Maslow, 1971) In his scheme, physiological needs are most basic, followed in order by needs for safety, belongingness, esteem, and self-actualization. This author believes we are faced with challenges which are analagous to the levels of this needs hierarchy.

Because our physiological needs are generally met (we look well-fed if not well-rested), our first challenge is safety or security. Can we keep our jobs? Can we maintain undergraduate enrollments in the face of a diminishing market for teachers? Responding to this challenge will require that each of our departments devise undergraduate programs not totally dependent upon teacher preparation. The success of each particular solution will depend upon our resources to operate the programs, our ability to secure university approval, and our ability to attract students. Although the degree of threat which we are experiencing varies many of us are currently at this safety need level. Many of the program revisions which are presently occurring reflect a response to crisis rather than a new and inspired vision of our field.

At this practical survival level of challenge, caution is urged against overinvestment of resources into programs which may attract very small numbers of students. The job market for college physical education graduates in many of these areas is uncertain. Undergraduate students who wish to be maximally employable may percieve, perhaps accurately, that the teacher preparation program provides the most employment options. The certified teacher can seek employment in the private sector, but the student foregoing certification will be inel igible for the single largest job market for physical educators, the public schools, We may need to provide programs in which the student can prepare for both teaching and an alternate career.

Presuming that our programs are secured, our next level of challenge is that of belongingness. We need to gain the acceptance of our colleagues in the

university. Physical education has long been a stepchild of the academic community, but many programs have been insulated from this sense of rejection by affiliation with College of Education. We have used our teacher preparation function to piggyback on education's somewhat marginal academic respectability. Extending our programs into areas other than teacher preparation will require loosening our bonds with education, psychologically if not administratively, and striking out on our own. Success in meeting this challenge will require both quality scholarship and clarification of the substance of our field. This writer does not believe we will effectively gain acceptance as an independent academic field as long as we are titled physical education.

But the challenge is more serious than just title. Some of our colleagues may have disdained us because they consider what we study - - movement, sport, dance, exercise - - to be trivial. But often it is the quality of our scholarship which is being questioned. We have taught courses in the sociology of sport without reference to basic sociological concepts and research. We have studied the personality of athletes without any theoretical understanding of the construct of personality. We have memorized origins and insertions without understanding of anatomical and physiological principles. The interdisciplinary nature of our field provides us with a unique advantage and vulnerability. Because we study movement and sport from a number of disciplinary perspectives, our departments should contain faculty members whose abilities and interests overlap those of scholars in several other departments. This overlap can provide a basis for professional communication and acceptance or it can magnify the visibility of our scholarly ineptitude. Our interest in movement or sport may be unique , but our scholarship must be theroetically and methodologically sound if we are to gain acceptance in the university community.

Maslow believes that a person who has gained acceptance in the social group is likely to become concerned with achieving special status, esteem or recognition. The parallel challenge facing us is the need to assume leadership and influence in the sports and exercise business world. If the graduates of our programs are to be employed, to be sought after by professional sports organizations, by exercise spas, by the media, then we must gain the esteem and recognition of these groups. If you wanted to learn to play golf or to ski, where would you go - - to a physical educator or to a golf or skiing pro?

The challenge of gaining status or esteem seems inextricably related to the need for certification or accreditation. Either of these approaches emphasizes quality control. Accreditation examines the quality of the program of preparation: is the program appropriate and complete? Are the faculty qualified in the areas taught? Are the standards for admission and exit sufficiently rigerous? Serious examination of these questions would probably indicate that many colleges and universities ought not attempt programs in some non-teaching areas if they lack the resources to offer a quality program. Certification, on the other hand, examines the quality of the graduate of the program and his or her qualifications for performing the job. Does the sports journalist have journalistic skills as well as knowledge of sport? Can the health spa worker

design and conduct a variety of exercise and relaxation programs? Golf and skiing are both excellent examples of certification programs for professional instructors which exist outside of educational institutions.

To establish accreditation or certification procedures involves several steps. Standards have to be agreed upon. Mechanisms for evaluating complicance have to be designed, either visitations for program accreditation or competency testing for certification. Employers have to be induced either voluntarily or by law to hire only accredited or certified persons. A challenge of this magnitude cannot be undertaken by a single institution, but must be done by a professional organization. A serious question may exist whether our professional organizations have either the resources or the clout to establish accreditation or certification in teaching or non-teaching fields. NASPE is currently investigating this possibility and would welcome reader suggestions.

Maslow theorizes that an individual who has satisfied physiological, safety, belongingness, and esteem needs is then able to be concerned with the higher order need for self-actualization, for the fullest development of one's potential. At the level of self-actualization, the challenge which faces us is the struggle to redefine our field with new clarity and meaning. The discipline versus profession debates of the last decade reflect this struggle. Observation indicates that our field historically has included both the discovery of a body of knowledge about movement, sport, dance, and exercise and the preparation of individuals for conducting programs of movement, sport, dance and exercise. The issue may not be which of these is the proper domain of physical education, but what is the appropriate relationship between discipline and profession, between substance and function.

The problem of the relationship between substance and function is compounded by the fact that each set of variables is multifacted and complex. The body of knowledge in our field is multidisciplinary and the functional roles physical educators fill are rapidly expanding. Perhaps just as most research problems have outgrown simple univariate statistics, the creative redefinition of our field may require a multivariate view of the world. A giant factor analysis or canonical correlation can be envisioned of all we know and all we do in physical education. The results might provide a structuring of our field which does not parallel either the traditional disciplines or existing professional roles.

When meeting the challenge in non-teaching options is discussed, not all of us are dealing with same levels of challenge. Many of us are responding to crisis: trying to keep our jobs and programs secure and trying to gain acceptance in our university communities. Maslow's premise that needs are hierarchical would indicate that we all must start there. But perhaps as physical education matures we must begin to face the challenges of esteem and self-actualization. We must attempt to establish accreditation and certification programs and finally, to conceptualize our entire field in a way that encompasses our body of knowledge and a widening range of vocational choices.

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SECTION II. PROTOTPYES OF PROGRAMS
Liberal Arts Approach

5. Human Kinetics Major: A Liberal Arts Approach

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Rutgers College

Any new program is, in some part, a product or a reflections of the educational system in which it will exist. Some historical background is, therefore, neccssary before any discussion can begin on the development and structure of the Rutgers College Human Kinetics major program.

The college is the largest undergraduate unit within Rutgers University, and one of six undergraduate colleges located in the New Brunswick area. Physical Education major programs are offered at three of these colleges in addition to six state colleges and two private institutions. Rutgers College has a long standing tradition of academic excellence in the liberal arts; and teacher preparation is, in general, viewed as the domain of the state colleges. The Rutgers College Department of Education functions primarily as a service to those students who wish to add the requirements of teacher certification to the standard criteria of any given liberal arts field. Even those students pursuing elementary or special education certification must carry a standard academic major as well.

The physical education major programs was, until 1976, a function of the Department of Education. Needless to say that a sub-group of a department which existed only to service a small percentage of those students majoring in other liberal arts fields commanded no great prestige within the college. We had one very real advantage, however; our discipline was a viable entity unto itself and we knew it.

Although the placement record of our graduates wes exceptional despite the ever declining job market, we were becoming increasingly aware of a growing number of students who sought more than the traditional K-12 teaching credentia Many students were pursuing this program, not for its own sake, but as an entree into physical therapy schools, sports related business ventures and a variety of other related careers.

We decided, therefore, to do four things: (1) Review the body of knowledge in our profession and attempt to pinpoint those specific areas which form the core as well as attempting to predict those competencies necessary to deal with the future directions of the profession, (2) use this core as the basis for a liberal arts major program, (3) superimpose upon this program a variety of advanced vocational options and (4) seek full recognition as a separate department. These steps were not lightly selected or easily accomplished. We were particularly concerned with step 1 since the delineation and justification of this body of knowledge was essential to our existence as a separate department. Further, we were fully aware that many colleges and

universities had chosen to expedite the development of non-teaching options by simply removing all teacher preparation courses from a physical education major and we considered this to be an academically unsound solution to the problem. Rather than simply restructuring our existing programs, we chose to develop a totally new one.

After considerable discussion we decided that anyone who wished to study the field would need, at the minimum, an understanding of:

1. Human Anatomy
2. Biomechanics
3. Motor learning
4. Exercise physiology
5. The various concepts and techniques involved in assessing one's physical and motor skill development and designing programs for self-improvement
6. The statistical and research tools necessary to investigate and interpret the body of knowledge

To this core we added: the collegiate requirement of English Composition, two semesters of biology which were prerequisite to the study of exercise physiology, two semesters of introductory psychology which we considered prerequisite to the study of motor learning, an introductory course which provided an overview of the profession, and 12 credits of electives in the field. The result was a liberal arts major in the study of Human Kinetics. A sample four-year schedule based on this curriculum is shown in Figure I.

FIGURE I

RUTGERS COLLEGE

MAJOR IN HUMAN KINETICS

Total Credits: 120 B. S. Degree

Fall

Freshman

English 101	3	Biology 102	4
Biology 101	4	Psychology 122	3
Psychology 121	3	Introduction to Human Kinetics	3
Electives	6	Electives	6
	16		16

Sophomore

Anatomy	4	Biomechanics	3
Human Kinetics: Assessment and Adjustment	3	Motor Learning	3
Electives	9	Electives	9
	16		15

Junior

Statistical Analysis of Motor Performance	3	Exercise Physiology	4
Human Kinetics Elec.	3	Human Kinetics Elec.	3
Electives	9	Electives	9
	15		16

Senior

Human Kinetics Elec.	3	Human Kinetics Elec.	3
Electives	12	Electives	12
	15		15

The title Human Kinetics was selected rather than Physical Education because we felt the term embodied the total field rather than only the teacher training aspect so commonly associated with the physical education title.

While most of the courses in the basic curriculum are clearly described by their titles, one course is particularly interesting and merits some additional explanation. That course is Assessment and Adjustment.

Assessment and Adjustment is an introductory course taken in the sophomore year. Like most introductory courses it was designed to provide the student with a background in statistics, motor learning, physiology of exercise, sport sociology, leisure counseling, and several other courses which are required. This function, however, is secondary to assessing the students' status in each of these areas and teaching them to develop a course of action which would help them correct or minimize their present deficiencies and capitalize on their strengths.

The function of assessing and adjusting the students' entry level at the onset of their professional preparation took precedence over the traditional function of a course such as this for the following reasons:

1. Our department does not have nor does it advocate a screening program for potential candidates; rather we feel it much more beneficial for the student if they are appraised of their status through a rational objective self-testing program and are helped, under the guidance of an instructor to plan an individually prescribed program which will best meet their needs and their future goals.

2. We recognize that a department such as ours exists not only to provide the instructional courses necessary for entry into a profession but to provide individuals with experiences which will have meaning in their personal lives now and in the future.

For these reasons Assessment and Adjustment is viewed not only as an important evaluative tool but as a basis for making decisions on future program selection and possibly vocational preference.

A student who completes only the basic human kinetics major is, like one who majors in history, psychology or most other liberal arts fields, qualified to do little more than graduate. The point is, however, that like these other disciplines, human kinetics is viewed as a legitimate and respectable area of study in and of itself, and the liberal arts major provides a strong base upon which to build a wide variety of vocational options.

In addition to the basic program, a student may elect one or more of the following advanced options:

K-12 physical education teaching certificate
Physical education for special students (K-12 physical education certificate and special education endorsement)
Leisure studies
Sports administration/business
Sports communication and public relations
Pre-physical therapy
Pre-occupational therapy
Research training
Physical fitness specialist
Independent study options

These options draw heavily upon the many excellent courses offered by other departments throughout the university. In each case where a particular discipline is heavily represented in a given option, that department shared in the planning of the option and the final course selection. Particular examples would be the Education, Economics and Human Communications departments in the teaching, sports business, and sports communications options respectively. This process not only guaranteed a well balanced, thoughtfully developed program, but it secured the understanding, cooperation and ultimately the respect of a number of other departmental faculties as well. This type of understanding enabled the program to gain the necessary approval of the Rutgers College faculty in the spring of 1977 without a single dissenting vote.

The program, now completing its first full year of operation has been a tremendous success. Students are presently enrolled in every option and some are simultaneously pursuing more than one specialty. There are, in addition, several students who are studying only the basic human kinetics major although, frankly, we encourage them to use the sixty-eight elective credits which are built into the program to develop some form of vocational preparation, Our students are doing very well academically and are excited over having the opportunity to gear their collegiate experience to their future goals. While it is too early to make direct statements regarding placements for our graduates, our conversations with various prospective employers and graduate schools lead us to believe that the placement potential of the Rutgers College graduates should be well above the average.

6. A Liberal Education Through the Study of Human Movement

W. Robert Morford and Hal A. Lawson
The University of Washington

A liberal education, according to its etymological roots, is one which is designed to liberate or "free" the individual to the point where he or she becomes an independent, critical thinker. Furthermore, liberal studies have been traditionally pursued for no other end than this, the development of an educationed person. But more recently, there have been reaffirmations of the value of liberal education as a form of pre-professional education. To borrow from Lindley J. Stiles' (1974) writing in the Journal of General Education, "A liberal education is the tap root for all professional training and performance . . . (because) . . . The ideal of an ordered or disciplined scholarship, which is the key goal of a liberal education, is essential to the search for truth that all professions must pursue (p. 53)."

At the same time that individuals such as Professor Stiles are reaffirming the virtues of liberal education, a growing number of individuals continue to voice their opposition to the concept.[1] This is particularly apparent in the field of physical education, where a liberal education has traditionally enjoyed the marketing success of the Edsel!

We wish to approach this topic by first explaining briefly why physical education and liberal education have usually been at best distant cousins and then by demonstrating how they may be united. This unity of liberal education and physical education can be shown to be consistent with the original conception of a liberal education and, simultaneously, provide the tap root for the kind of professional education suggested by Professor Stiles.

The idea of a liberal education being a prerequisite to professional training is not a widely held concept in physical education. Professional training for future physical education professionals has stood in direct contrast to the concept of a liberal education. This is understandable given our history and the manner of our evolution as a degree program on most university and college campuses throughout the country. Our traditional and long-held model has been exclusively one of teacher preparation. This obvious vocational orientation has not only been designed to prepare individuals to function in a limited setting but, as Kroll (1971, p. 76) has pointed out, it has been modeled after already-existing school programs and teacher roles within those programs.

The inherent danger of such an approach is that a mastery of basic subject matter is sacrificed in favor of occupation-specific role behaviors. In brief, this curricular pattern in physical education has inhibited the development of a body of knowledge from which a liberally based curriculum

might have resulted. Even more problemmatic is the application of this same occupation or task-specific curricular model to the preparation of practitioners in fields other than teaching, fields such as sport administration and exercise management. Whether the occupation is teaching or, more recently, one outside of teaching, the pattern is essentially the same. After an examination of existing role requirements and role behaviors, a curriculum is formed which mirrors the existing reality.

Programs of professional education that erupt in this manner were labeled "ad hoc programs" by the late Robert Maynard Hutchins (1968). As a long-time advocate of liberal education, Hutchins was extremely critical of the "ad hoc" curricular pattern because, in an era of rapid social change, the occupation for which the curriculum is designed is more likely to undergo rapid change than is the curriculum that prepares the professionals. Thus, instead of leading the profession by anticipating change, the educational curriculum is always in need of adaptation. Since adaptation is so slow to occur, the professional rapidly becomes outdated, or, worse still, becomes obsolete or unemployable in a parallel field. Thus, "ad hoc" education for professional ends has a built-in tendency to be continually out-of-date. Hutchins puts it this way:

> The more technological the society, the less "ad hoc" education can be. The reason is that the more technological the society is, the more rapidly it will change and the less valuable ad hoc instruction will become. It now seems safe to say that the most practical education is the most theoretical one (p. 8).

Aside from its tendency to build-in obsolescence, ad hoc education possesses another shortcoming. When current field-based operations are not fully grounded in theory and systematic research, they may be at least inefficient, or at most harmful. Consequently, when questionable practices are disseminated as part of an ad hoc professional curriculum, the error becomes canonized. That is, ad hoc professional education may insure not only the continuation of a problem, but more significantly, it may also insure its multiplication. Such canonization of error is lethal to a profession's modes of operation as well as to its claims to legitimacy.

In contrast to the ad hoc curriculum which develops professional preparation in terms of its occupational requirements, the liberally based curriculum stresses the importance of theory in generalized application. One of the aims of a liberal education, as Stiles (1974), p. 53) has pointed out, is "to sharpen sensitivity to the importance of knowledge for the mind and the relationship of knowledge to reality."

Another of the aims of a liberal education is the all important emphasis on the interconnectedness of knowledge. Or, as Little (1974) and Hirst (1973) have both stressed, to make more transparent the actual relationships

between and among forms of knowlege and their acquisition. Little has also stressed that "Before liberal education can rest on a firm base it must re-establish the connections, not between disciplines as such, but between the types and sources of knowledge and methods for acquiring it (p. 88)." These are important objectives when placed in the context of the continual social change that marks our own age.

In short then, the vital function of a liberal arts major - - or a liberal arts emphasis in a professional program - - is to provide the student with some understanding of selected phenomena. Such understanding includes the description, explanation and prediction of these phenomena, a discussion of their precedence to technical refinement and, in addition, an appreciation for, and importance of, the inter-relationship between fields of knowledge and the structural systems of their knowledge.

As a cross-disciplinary field, Kinesiology is uniquely suited to filling the bill on all counts. Its cross-disciplinary base allows it to be uniquely suitable to both liberal study and professional application. So as to clarify the basis for this conclusion it will be necessary, in the first place, to digress briefly to explain the cross-disciplinary concept and, in the second place, to say something about the relationship of Kinesiology to physical education.

A cross-disciplinary program is something altogether different from an inter-disciplinary one, although both may serve the ends of a liberal education equally well. Whereas the adjective, interdisciplinary, describes the interaction among two or more different disciplines in the form of a communication of ideas to the mutual integration of the fields concerned (Swora & Morrison, 1974, p. 45), the term cross-disciplinary implies the integration and magnification of discrete portions of several disciplines. As an example of the latter, Kinesiology - - the study of the structure of human physical and ludic activity - - develops discrete portions of certain of the physical biological, psychological and social sciences.

The relationship between Kinesiology and physical education is a direct one. As a professional field, physical education can concern itself with more than teacher training. It is possible to prepare an army of differentiated professionals to effectively package, deliver and maintain for society the various institutionalized components of its physical and ludic activity systems. Yet, to avoid Hutchins' "ad hoc" syndrome, a theoretical substrate is needed to provide a basis of commonality and parsimony. Kinesiology, then, serves as the disciplinary base from which the theoretical principles for an effective professional practice may be derived.

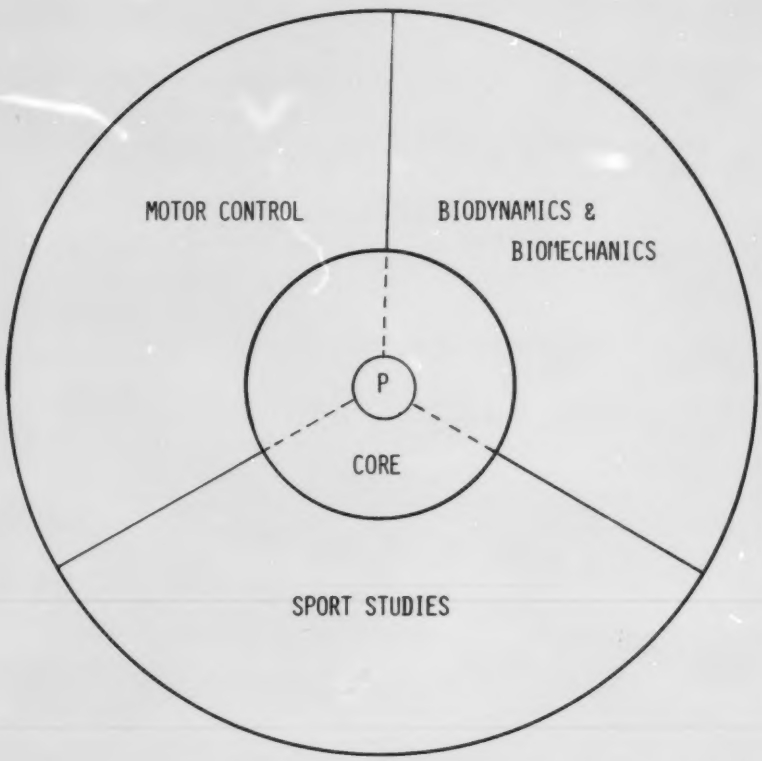
Thus, whereas the pursuit of knowledge for its own sake is always deemed to be a worthy academic objective without need of further justification, we have, in the case of kinesiology, a field of knowledge that may also form the foundation for a career in a profession or vocation. The point is, the orientation to basic subject matter in the major in lieu of ad hoc occupational training, does not preclude a concern for the preparation of professionals any

more than it does with a major in departments such as art, music or languages. However, the programmatic basis which reflects our concern for professional preparation does differ from most others around the country. Instead of describing professional preparation in terms of the occupational requirements of a given vocational field, the program seeks to instill instead a thorough understanding of the importance of, and need for, theory. In short, the understanding of Kinesiology precedes its professional application and manipulation. To this extent, the liberal arts model for a major in Kinesiology offers an alternate rather than a duplicate model for professional preparation.

The major in Kinesiology, as we have developed it, and its relationship to physical education can be explained with the aid of a series of diagrams. The basic components of the field are presented in Figure 1. At the center of

FIGURE 1

KINESIOLOGY



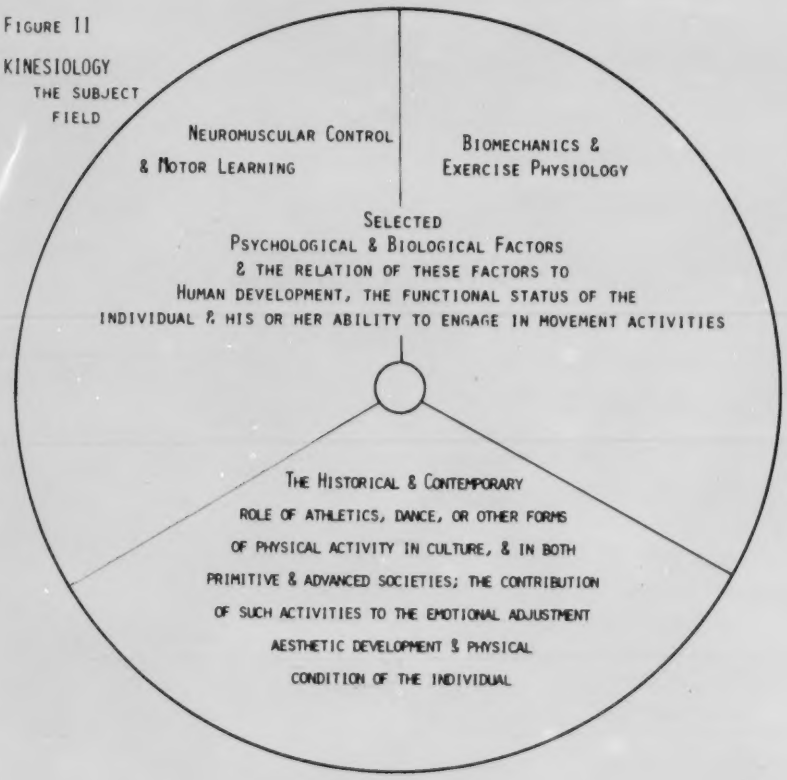
the circle, the letter P represents performance around which the whole field takes shape. Performance here consists of a series of performance labs in which students develop their own skill and appreciation level for performance. These labs are devoid of any reference to pedagogical concerns; performance is stressed for its own sake.

The next wider circle designates the core of the major. These are the first level courses that will eventually permit specialization in the more firmly bounded outer portion of the circle. The courses in the core are not survey courses, they are the first courses that one must take to advance further into one of the three areas. These courses are not introductory courses in the traditional sense. Unlike traditional survey courses, these first level courses as sub-discipline specific and are designed to disseminate knowledge without any designs for professional application. Consequently, they may be viewed as consistent with the liberal arts model. The dotted lines between the segments of the core are meant to imply that at this stage subject matter overlaps between one potential area of specialization and another - - frequently in the form of instructors with differing specilizations teaching the same course on a tandem basis. Finally, the outer protion of the circle designates three discrete areas of specialization within Kinesiology in which indepth specialization takes place. For this major, 36 quarter hours (i.e. 8 courses) out of a total of 78 quarter hours are required in the core.

Figure II goes one step further and describes the body of knowledge comprising the field of Kinesiology as it is presently developed and taught to undergraduate majors. Divided into three segments, the subject matter comprises neuromuscular control and motor learning, biomechanics and

FIGURE II

KINESIOLOGY
THE SUBJECT
FIELD


NEUROMUSCULAR CONTROL
& MOTOR LEARNING
BIOMECHANICS &
EXERCISE PHYSIOLOGY
SELECTED
PSYCHOLOGICAL & BIOLOGICAL FACTORS
& THE RELATION OF THESE FACTORS TO
HUMAN DEVELOPMENT, THE FUNCTIONAL STATUS OF THE
INDIVIDUAL & HIS OR HER ABILITY TO ENGAGE IN MOVEMENT ACTIVITIES
THE HISTORICAL & CONTEMPORARY
ROLE OF ATHLETICS, DANCE, OR OTHER FORMS
OF PHYSICAL ACTIVITY IN CULTURE, & IN BOTH
PRIMITIVE & ADVANCED SOCIETIES; THE CONTRIBUTION
OF SUCH ACTIVITIES TO THE EMOTIONAL ADJUSTMENT
AESTHETIC DEVELOPMENT & PHYSICAL
CONDITION OF THE INDIVIDUAL

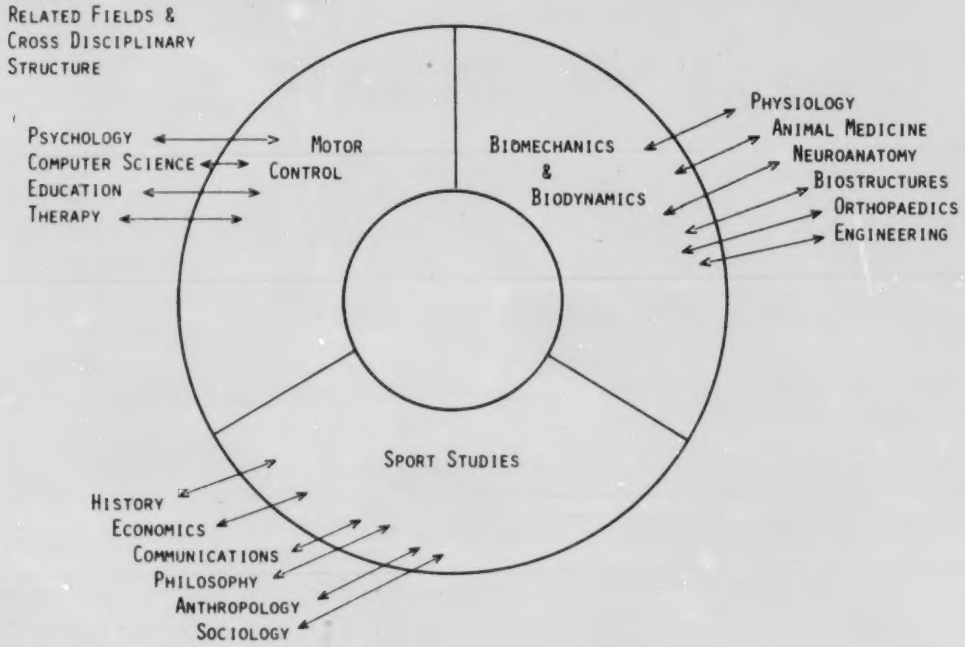
exercise physiology and other selected psychological and biological factors and the relation of these factors to human development, the functional status of the individual and his or herability to engage in movement activities; the historical and contemporary role of athletics, dance, or other forms of physical activity in cultures, and in both primitive and advanced societies; the contribution of such activities to the emotional adjustment, aesthetic development and physical condition of the individual (Adapted from Henry, 1964). This subject matter is developed in a total of twenty undergraduate upper-division courses taught by ten faculty, all of whom have applintments in physical education.

In other words, the study of physical activity is approached from a cross-disciplinary perspective. That is, the major draws upon, integrates and magnifies discrete portions of other disciplines in the physical, biological, psychological and social sciences to describe and explain the many phenomena associated with physical activity.

As a cross-disciplinary field, this discipline shares many concerns with the other fields just as they also share concerns with one another. Moreover rather than pursuing study within the full range of a particular discipline, the kinesiology student, because of this particular focus of inquiry, seeks, instead, a broad-based spectrum of study that corsses several disciplines. The two-way arrows on the periphery of the circle in Figure III are meant to portray the two-way flow of ideas, knowledge and students between the disciplines outside the circle and the subject matter within the segments.

FIGURE III

KINESIOLOGY — RELATED FIELDS & CROSS DISCIPLINARY STRUCTURE



It must be stressed that the purpose of the major is not to borrow the knowledge of the parent disciplines applying them to the practical problems of physical activity. Rather, the major is concerned with presenting and developing, in an integrated, orderly and logical sequence, certain portions of the traditional disciplines (Figure III) that are appropriate to the purpose of the major as previously defined.

For instance, in the area of exercise physiology, the student of kinesiology is not seeking to become a low-grade physiologist, but rather a student of human physical performance. The student must know physi ology of course, but that which is particularly concentrated within the context of selected phenomena to, for example, endurance - fatigue-recovery, accelerated work, and physical fitness. Therefore, the focus of attention is not no physiology so much as it is on physical performance. Similarly, in psychology, the student in kinesiology comes to grips with only a portion of that disciplinary field, specifically, human motor performance. The student approaches this subject, not with the object of utilizing or extending psychological theory into the whole domain of human behavior, but rather to study such problems as activity preference selection, work-rest patterns in learning motor skills and the control-response functioning of the so-called kinesthetic sense. Most importantly, the kinesiology student involved in the study of, for example, activity preference selection in humans, has an understanding of exercise tolerance, the role of sports and games among and within various cultures and social systems, together with an appreciation of the structure and classification of play and physical activity.

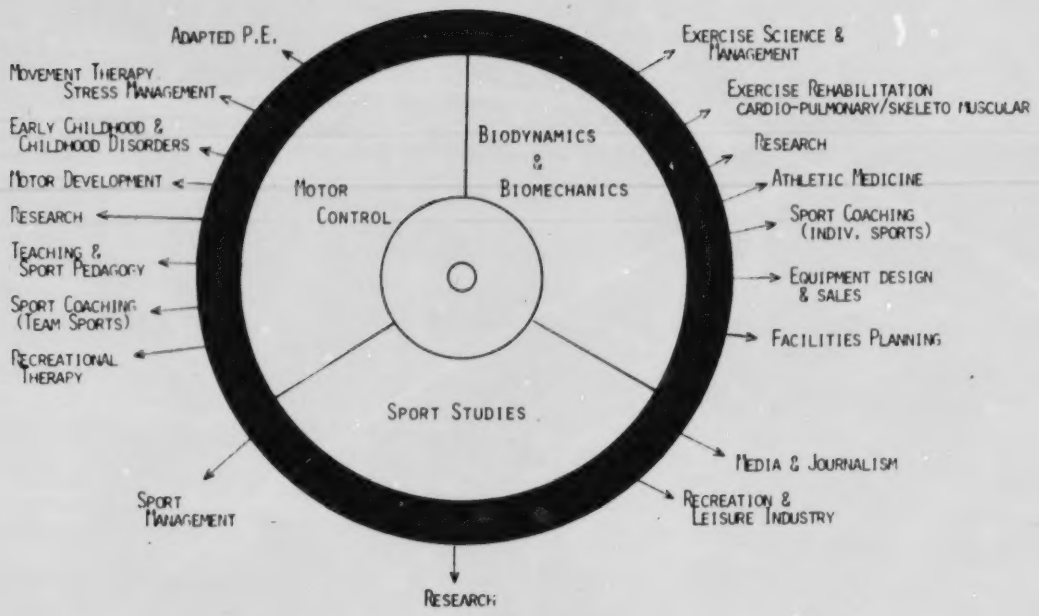
This breadth of preparation, spanning carefully developed portions of several disciplines, permits the student of kinesiology to approach this subject from two vantage points, neither of which are mutually exclusive, The first is one of mastery over the operation of a given phenomenon, for instance, physical fitness or, sport in America . The second is the contribution to an understanding of human behavior and culture from the vantage point of the patterns of physical activity.

Our experience is that the major in kinesiology, as it has been outlined in Figures, I, II and III, offers the student a variety of career possibilities - - the more obvious of which are shown in Figure IV. The wide ring around the major is meant to represent an applied zone in which courses whose primary function is to extend knowledge developed in the major proper to the more practical requirements of the profession. All such courses have as prerequisites courses listed in the core of the major. For the most part, these courses are taught by part-time clinical faculty who are regularly employed in a related professional capacity.

FIGURE IV

APPLIED KINESIOLOGY

(OCCUPATIONAL OUTLETS FOR MAJORS IN KINESIOLOGY)



When appropriate, students select from a fairly wide array of applied courses those which are appropriate for their career aspirations. Coursework in the applied zone is then supplemented by opportunities for fieldwork or independent study, often undertaken in the clinical instructor's own agency or under their supervision.

To properly implement this aspect of the department's work has been the main thrust of our efforts over the last few years. The planned association of the department of kinesiology with various community agencies is now beginning to pay dividends. The utilization of their personnel as part-time instructors and their agencies as field placement opportunities has directly benefited the program by opening up possibilities for potential non-teaching careers for majors. While at the same time making the agency itself aware of the cooperative possibilities inherent in an association with a university department with a strong research faculty and attendant facilities.

The array of occupational outlets for kinesiology students as shown in Figure IV is not by any means a total list. However, from our experience, the various categories shown encompass the kind of careers that have attracted our majors. Some of these specializations can be acquired with very little added coursework beyond the four year degree schedule, some others require a fifty year or a graduate level schedule.

The inter-relationship between the major in kinesiology and supplementary coursework in either related fields and physical education is shown for three different areas of professional preparation. Figure V outlines the scheme of preparation for students in Sport Management, a graduate program that builds upon the kinesiology core and the sport studies subfield. The ovoids within the triangle represent three different components which, when added to the basic preparation in kinesiology, provide the student with appropriate occupational specialization and experience. Figure VI presents the preparation structure for Exercise Management, exercise leaders or cardio-pulmonary rehabilitation specialists. While all of these and other suboccupational areas are subsumed under the broader title of Exercise Management, they do not automatically all experience the same type or level of preparation and, furthermore, the category of field experience is likely to differ according to the interests of the student. The last diagram is Figure VII and depicts the preparation of the physical education generalist or teacher of physical education and is in essence a five year program.

FIGURE V

KINESIOLOGY —
WITH SPECIALIZATION IN
SPORT ADMINISTRATION
(MASTER'S LEVEL)

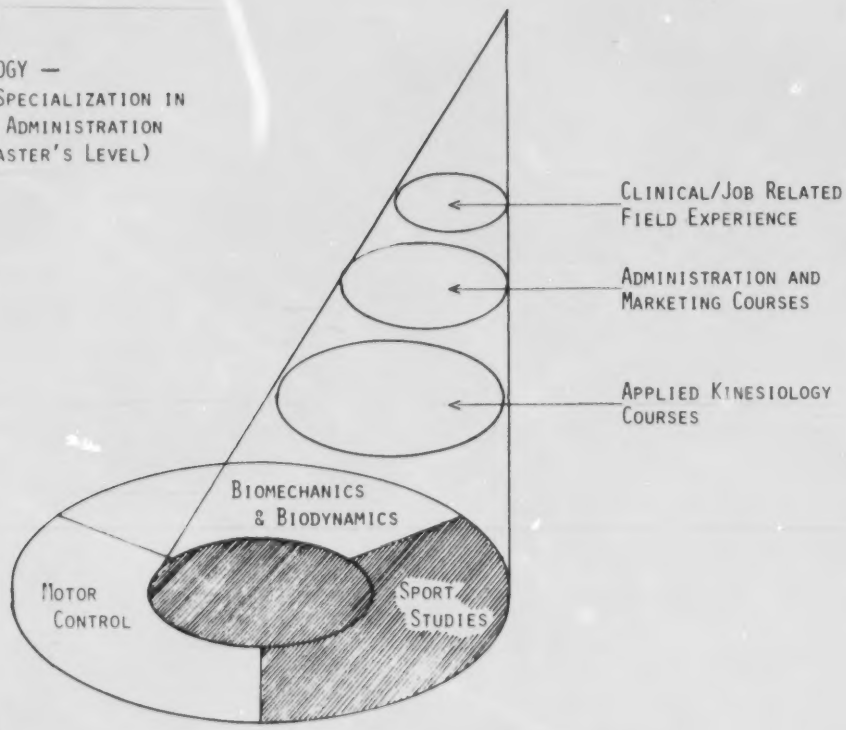


FIGURE VI

KINESIOLOGY —
WITH SPECIALIZATION IN
EXERCISE MANAGEMENT

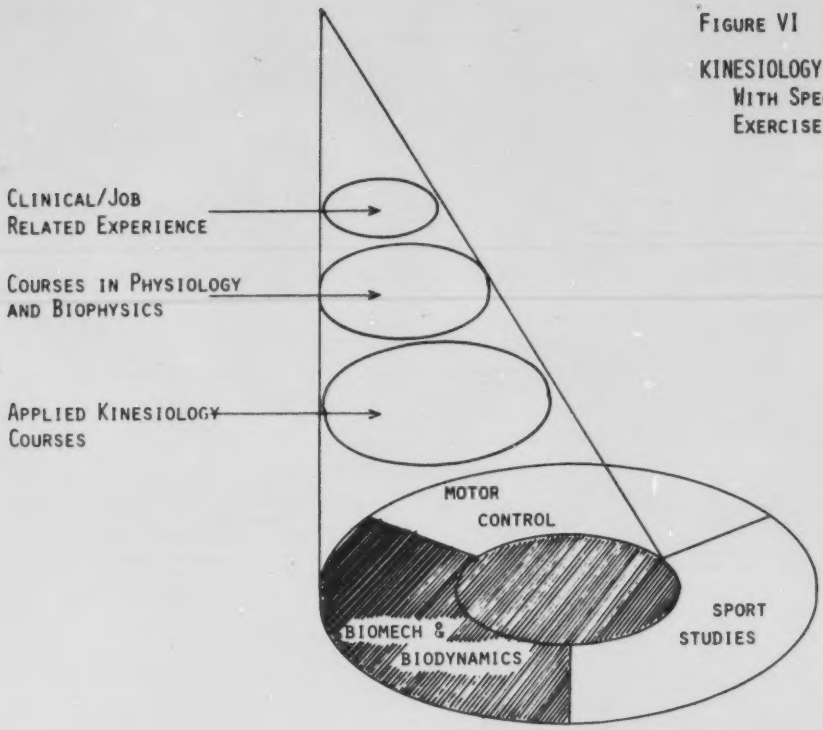
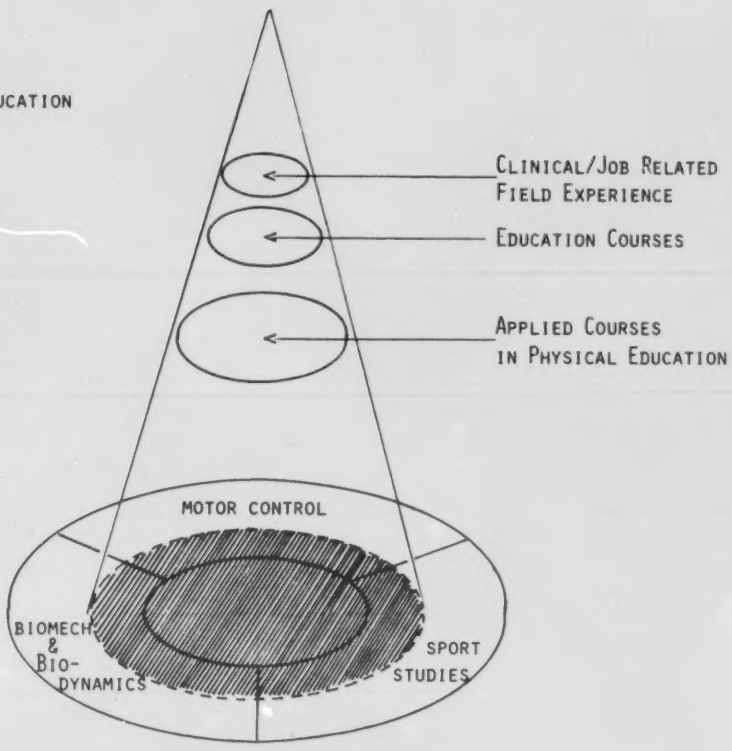


FIGURE VII

KINESIOLOGY —
THE PHYSICAL EDUCATION
GENERALIST



The purpose of the last three diagrams is merely to demonstrate the potential of a liberal arts major in its "tap root" role. No further elaboration of the options is intended here. However, the point we wish to make is that a liberal arts emphasis or core in kinesiology, while clearly non-teaching by intent, does not require that it be entirely severed from the practical outcomes of an occupationally oriented field. Quite to the contrary, the point we must make is that from the perspective of such a major, the subject matter developed and transmitted to the student via its program of study is very much basic to the practical concerns of professional physical education and also to the needs of the larger society as well.

Lest the obvious be overlooked, we also wish to emphasize, in closing, that a strictly liberal arts model curricular option is also available to students. After the core courses, students may elect advanced courses in the discipline in order to acquire a better breadth and depth in their subject matter field. Students who choose this curricular option do so for a number of reasons; the most obvious of these is the students' desire to learn more about the phenomena embraced under Kinesiology's cross-disciplinary umbrella.

Therefore, Kinesiology can be seen to serve simultaneously as a tap root for pre-professional education and for a liberal arts type education in its strictest sense. For a profession which has been almost exclusively limited to ad hoc curricular options, the further elaboration of Kinesiology in yet other ways in yet other institutions, offers exciting possibilities for change. Not only is there a demand in society for knowledge about sport and its operation and about exercise and its impact on the life of the late twentieth century human, but this knowledge is also basic to a profession that concerns itself with the development of an individual's motor coordinations and physiological capacity. the teaching of sports and dance activities, the promotion and management of sport and exercise systems, the care and rehabilitation of the body through exercise, and the development of an awareness at all levels of society for the significance of physical and ludic activity in the life of human beings.

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[1]The demise of liberal education in recent decades is attributable, in part, to the relaxation of the rigid systems of carefully chosen and well integrated requirements and, in part, to the increasing vocationalism of students and the concomitant growth of the professional schools. Abetting this decline has been the trend among the traditional fields of the arts and sciences to particularize their knowledge to such an extent that the philosophical or intellectual unity that once existed among them has become almost impossible to identify.

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7. A Kinesiological Science Program

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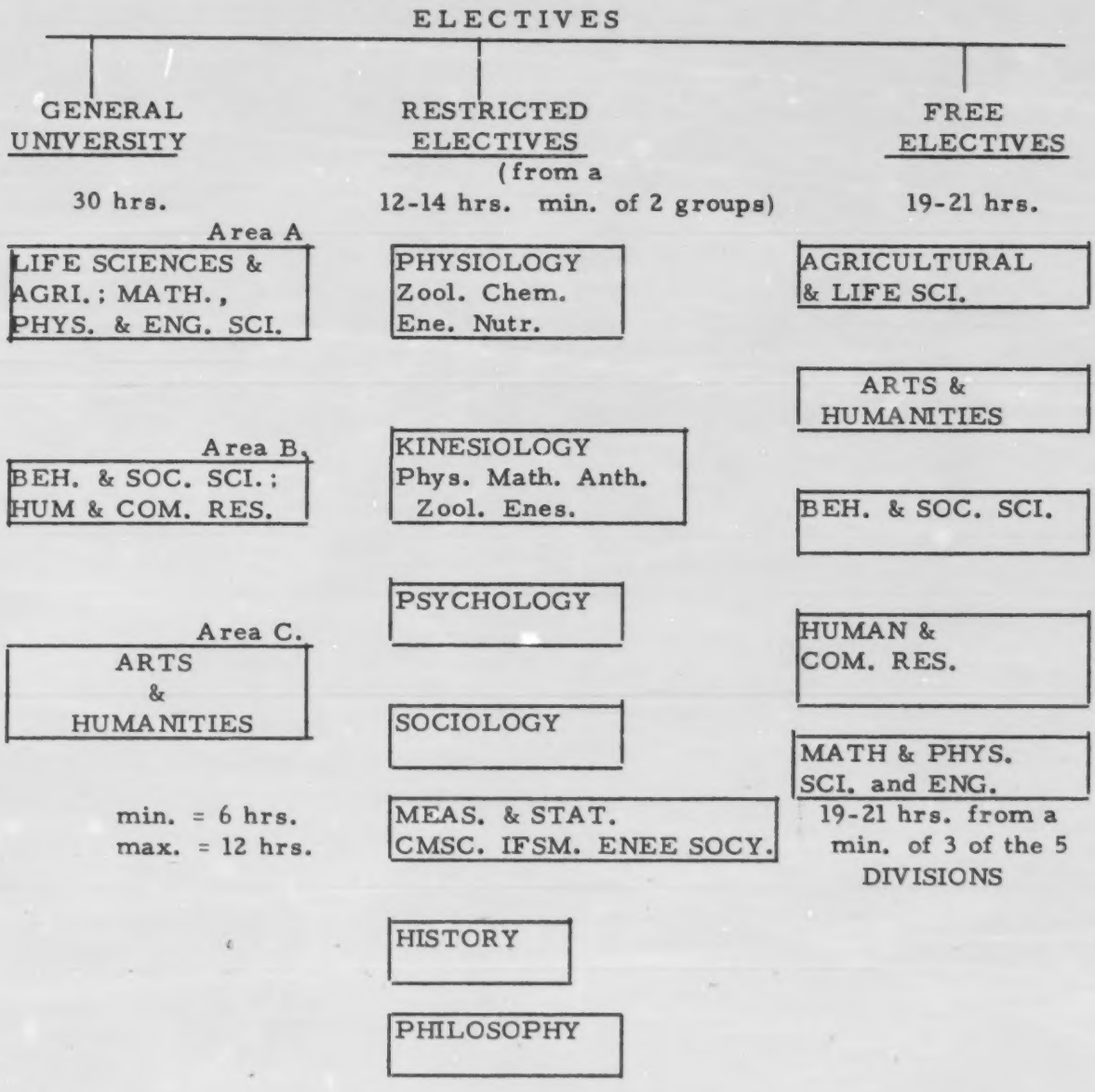
Historically, the main thrust of most college physical education degree programs has been the preparation of physical education teachers for the public schools. In many institutions the baccalaureate degree in physical education could not be earned without the simultaneous completion of certification requirements. Because of this requirement, opportunities for acquiring increased depth in physical education subject matter have been distinctly limited, and many students with genuine and abiding interests in physical education subject matter have elected not to become majors because they would be forced to meet requirements for which they had no interest, namely, teaching in the public schools. It could therefore be concluded that the understanding of our place and function in higher education has been constrained by too narrow a perspective. Our excessive concentration on the preparation to teach sport skills and coach in the public school setting has placed us in a posture where a sizable number of opportunities to contribute, as our subject matter would suggest, have too often eluded us. We, the self-proclaimed movement experts, forcefully acknowledge that every human being moves from birth to death, but in practice, we have notably neglected the movement experiences of the pre-school child , most adults in their middle years, and the aged.

Recognizing this problem, in 1971 a group of the faculty of the Department of Physical Education, University of Maryland, met to study the possibility of developing an undergraduate curriculum designed to study the discipline of physical education. At this time, two important changes were occurring in the University, an administrative reorganization and a change in the General Education Requirements for Undergraduate students. One important criterion of the Chancellor's Plan for Reorganization was flexibility of administration and programs. This flexibility provided, as will be seen later, the opportunity to design a very flexible course of study. To meet the needs of the heterogeneous student body, the University Senate approved a plan to eliminate all specific course requirements in the General Education Program, and to replace the former American Civilization Plan with a 30-hour requirement (Figure 1.) spread across three broad areas of study: namely,
Area A:Life Sciences and Agriculture; Mathematical, Physical and Engineering Sciences
Area B: Behavioral and Social Sciences, Human and Community Resources and
Area C: Arts and Humanities
With limited restrictions, the new requirements were predominately elective.

Figure 1. STRATIFIED ELECTIVE PLAN



In their deliberations, the Department Faculty Committee also was interested in developing a program of study which would broaden the services offered to today's students with their more diversified interests and backgrounds. In keeping with this concept, it was believed that any new curriculum should demonstrate considerable freedom for selecting elective credits, thus reducing specific course requirements for graduation. Again this sentiment paralleled what was recommended by the Chancellor and strongly endorsed by the University Senate, namely that the departments, colleges, and divisions limit the amount of coursework specified in degree programs, allowing for greater diversity.

The self-formed committee asked that they be permitted to present their preliminary findings in an informal setting to the Dean and Department Chairmen. The only problem encountered and, as is evident later, a problem that still is plaguing us, was an acceptable title for this new program. We finally settled on the title "Kinesiological Sciences." The program was then presented to the Undergraduate Professional Committee and after approval here, to the Executive Committee of the Department. After the Department Chairman's endorsement, the program was approved by the Educational Policy Committee of the College and the Dean. At that time in our University, new programs went from the Dean to a Campus Programs, Courses and Curricula Committee, to the Education Policy Committee, and then to the University Senate. Once approved by the Senate and endorsed by the Chancellor, it then went to the Vice-President of Academic Affairs, who with the President's approval, presented it to the Board of Regents. Since the program was designed to meet the newly structured University criteria for reorganization and program change, timing was right, thus we had little difficulty in securing approval of this program.

The two major obstacles in securing approval of this program related to its utility and the acceptance of physical education as a discipline by the University faculty. These obstacles were overcome, however, and the program was implemented.

The program of studies entitled "Kinesiological Sciences" leads to the Bachelor of Science degree. The primary aim of this four-year program is to impart to the student a scholarly understanding of human beings as individuals, as they engage in physical activities in their daily lives and in other activities which serve as an expression of their physical and competitive nature. Although the program is housed in the Physical Education Department, it is not a teacher-preparation curriculum nor is it limited in appeal to those with well-developed interests in physical education as a profession. It is designed for all of those students, regardless of background, who are vitally interested in the fascinating realm of sport and the human activity sciences.

The core of the curriculum is the study of the mechanisms of human movement (mechanical, physiological, psychological, aesthetic, etc.) and it is from this core that the title of the degree program (which means the

sciences concerned with the study of human motor activities) was derived. The body of knowledge explored may be described in abbreviated form as follows:

> The theoretical bases and effects of physical activity, biomechanics, exercise physiology, neuromotor coordination, motor learning, and the psychological factors inherent in physical performance.
>
> History of Sport, both ancient and contemporary, its philosophical foundations, and the study of social factors as they relate to human behavior.
>
> Quantification and description of performance, and the relation of these factors to human development and physical fitness.

The program makes possible the broad use of elective credit so that various student interests may be combined on an interdisciplinary basis. Of the 123 credit-hour minimum graduation requirement, approximately half are elective in one form or another.

There are three types of electives in the program. As previously illustrated in Figure 1., the thirty hours of the University General Requirements may be elected within the three broad curriculum areas, and nineteen to twenty-one hours, are called "Free Electives." There are two restrictions in the free electives; namely, no more than twelve credit hours may be taken in one division, and they must be courses chosen from three of the five divisions. All activity courses are elective.

"Restrictive Electives" consists of courses which support a student's selected area of interest which may be: (1) Physiology of Exercise, (2) Kinesiology, (3) Psychology of Sport, (4) Sociology of Sport, (5) History of Sport, (6) Philosophy of Sport, and (7) Measurement and Statistics. Two courses are normally chosen from each of two areas from a list of courses supporting these seven areas of student interest. Here is an obvious attempt to identify and encourage limited specializa tions within the broader discipline.

For example, students interested in physiology of exercise elect two courses from the following areas: Chemistry, Biochemistry, Cell Biology, Neuro-physiology, Vertrebrate Physiology, Nutrition, and so forth. Students interested in kinesiology elect a minimum of two courses from Physics, Mathematics, including Calculus, Anthropology, and Engineering Mechanics (Statics, Dynamics). Those interested in Psychology or Sociology of Sport elect courses in the Psychology and Sociology Departments. Titles of typical courses include Developmental Biopsychology, Physiological Psychology, Perception, Experimental Psychology (Learning, Motivation, Sensory Processes),

Dynamics of Social Interaction, Deviant Behavior, Collective Behavior, Small Group Analysis, Industrial Sociology, Sociology of Race Relations, and so forth.

Likewise, students who have a special interest in History or Philosophy of Sport elect courses like Social and Cultural History of America, History of European Ideas, Women in American Society, History of Ideas in America , The Renaissance, The Reformation, Ancient Greece, Introduction to Philosophy, Ethics, Elementary Logic and Semantics, Theory of Knowledge, Political and Social Philoscphy, and so forth. Typical courses selected by students who have a special interest in Measurement and Statistics are Principles of Testing and Evaluation, Quantitative Research Methods, Introduction to Computing, Electronic Data, Processing, Intermediate Statistics for Sociologist, and so forth. Because students may choose any two of the ideas identified, it is understandable that related areas are usually chosen. Psychology of Sport and Sociology of Sport are often combined as is the Physiology of Exercise and Kinesiology combination. History of Sport and Philosophy of Sport are usually chosen as a combination. However, exceptions have been noted to include Philosophy of Sport and Physiology of Exercise.

Since so many courses in the program are electives from disciplines, and since so manyof the courses listed above have prerequisites, it is important that each student be carefully advised by a member of the faculty who can discover the student's interests and advise the student on courses which will make the greatest contribution to the student's goals and interests. The importance of enlightened advisement in this program cannot be overemphasized.

The specific course requirements are presented in Figure 2 as a recommended four-year course of study.

Figure 2. KINESIOLOGICAL SCIENCES CURRICULUM

FRESHMAN YEAR

ZOOL	101	(General Zoology)	4
MATH	001	(Review of High School Algebra, if required)	0
MATH	105	(Fundamentals of Mathematics)	4
or			
MATH	110	(Introduction to Mathematics)	3
PSYC	100	(Introduction to Psychology	3
PHED	180	(Introduction to Physical Education)	2
HLTH	140	(Personal and Community Health)	3
		Activity Courses[1]	2, 2
		General University Requirements[2]	9
		Electives[3]	3
			31 - 32

[1]Activity courses may be chosen from two separate programs within the Physical Education Department: (1) PHED Basic Program series, and (2) PHED Professional Program series. If the activity selected (Apparatus, Golf, Field Games, Lacrosse, Aquatics, etc.) is contained within the Professional Program series, then it must be taken in that program. However, if the activity selected (Racquetball, Sailing, Backpacking, Canoeing, etc.) is not one of those from the Professional Program series, it may be taken in the Basic Program series.

[2]See Current Academic Regulations concerning General University Requirements.

[3]Free electives must be distributed among at least three (3) University Divisions, and not more than 12-credit hours may be taken in any one Division. These are to be considered above and beyond the General University Requirements.

SOPHOMORE YEAR

ZOOL	201, 202	(Human Anatomy and Physiology)	4, 4
PHED	287	(Sport and American Society)	3
		Activity courses	2, 2
		General University Requirements	12
		Electives	6
			33

JUNIOR YEAR

PHED	400	(Kinesiology)	4
PHED	480	(Measurement in Physical Education)	3
PHED	455	(Physical Fitness of the Individual)	3
		General University Requirements	6
		Restricted Electives[1]	12 - 14
		Electives	3
			31 - 33

[1]12-14 hours must be selected from two (2) of the following groups of courses. Normally this would mean a minimum of two courses from each of two groups, and are considered to be exclusive of the General University Requirements.

SENIOR YEAR

PHED	450	(Psychology of Sport)	3
PHED	460	(Physiology of Exercise)	3
PHED	485	(Motor Learning & Skilled Performance)	3
PHED	493	(History & Philosophy of Sport and Physical Education	3
PHED	496	(Quantitative Methods)	3
PHED	497	(Independent Studies)	3
		General University Requirements	3
		Free Electives	7 - 9
			28 - 30

Total Credit Hours for Graduation 123-128

KINESIOLOGICAL SCIENCES PROGRAM SUMMARY

Major Course Requirement - 62 - 63 hours

PHED 180, 287, 400, 450, 455, 460, 480, 485, 493, 496, 497, and 8 hours of activity courses
HLTH 140
ZOOL 101, 201, 202
PSYC 100

General University Requirements	30 hours
Free Electives	19-21 hours
Restricted Electives	12-14 hours
Total	123-128 hours

The only new course added to the current physical education curriculum was PHED 497, Independent Studies Seminar, Therefore, no new faculty were required to add the B.S. degree in Kinesiological Sciences Program to the present department curriculum. Many curricula in universities today are culminated by requiring the student to demonstrate a depth of knowledge in the subject matter. The Independent Studies Seminar was designed to give the student, under the careful guidance of a professor, an opportunity to develop a major seminar paper in an area of interest. That is, in Sport Psychology, Sport History, Exercise Physiology, Biomechanics, Sport Sociology, Motor Learning and Performance etc.. The paper is then presented in seminar and critiqued by advanced students and faculty.

To date, the seminar has been most successful. The students in seminar are not only exposed to papers presented by their peers, they also have an opportunity to participate in presentations given by selected graduate students, members of the faculty, and visiting scholars. Examples of papers presented are:

Surgical Repair and Reconstruction of Ligamentous Injuries of the Knee Joint
The Cardiovascular Benefits of Exercise on the Aging Process
The Heat Differential in the Palmar Area of the Forearm During Various Intensities of Isometric Exercise
A Comparison of Women's Athletics in England and The United States 1920-1925
Aggression in Sport

There are many unusual and varied job opportunities for graduates of the Kinesiological Science Degree program. In a recent paper presented at the AAHPER National Convention, Dr. Charlotte Lambert noted a large number of specific job opportunities for individuals trained in physical education. In addition to these career opportunities, an individual with a B.S. degree in Kinesiological Sciences would also be eligible for many positions available to those with a Liberal Arts degree. Possible physical education opportunities exist in athletic clubs, industry, homes for the aged, health spas, hospitals, prisons and so forth. In many institutions, rehabilitation programs, child development programs, therapeutic programs, fitness programs, sport porgrams and instructional programs can be developed. In addition to the professional athlete, athletic programs need business managers, athletic trainers, facility managers, sports announcers, sport journalist, sport photographers, sport information directors, referees, scouts, ticket managers, athletic nutritionists, sport psychologists, sport equipment and safety consultants; sporting good manufacturers, and sales personnel. Research opportunities exist for studying movement, the mechanics of the musculature employed, as well as the work loads of that musculature in industry, space, underwater, and in other unusual environments. (Lambert, 1976)

Also, students completing the B.S. Degree in Kinesiological Sciences are well prepared to enter graduate work. With careful early advisement, individual programs can be structured to include the courses needed for such employment opportunities. Extensive elective flexibility makes this possible.

To date about fifteen students have graduated from this new program. Although it is difficult in a large university to follow all students after graduation, we have maintained contact with most. To name a few, one graduate has been accepted to podiatry and another to dental school; two have entered graduate school in physical education, where one is a graduate assistant working in a Sports Medicine and Physical Fitness Center as an Exercise Leader; two have entered Physical Therapy schools; one is employed as a Program Director of a large year around camp; and one is working in a clinic setting with children who have learning disabilities.

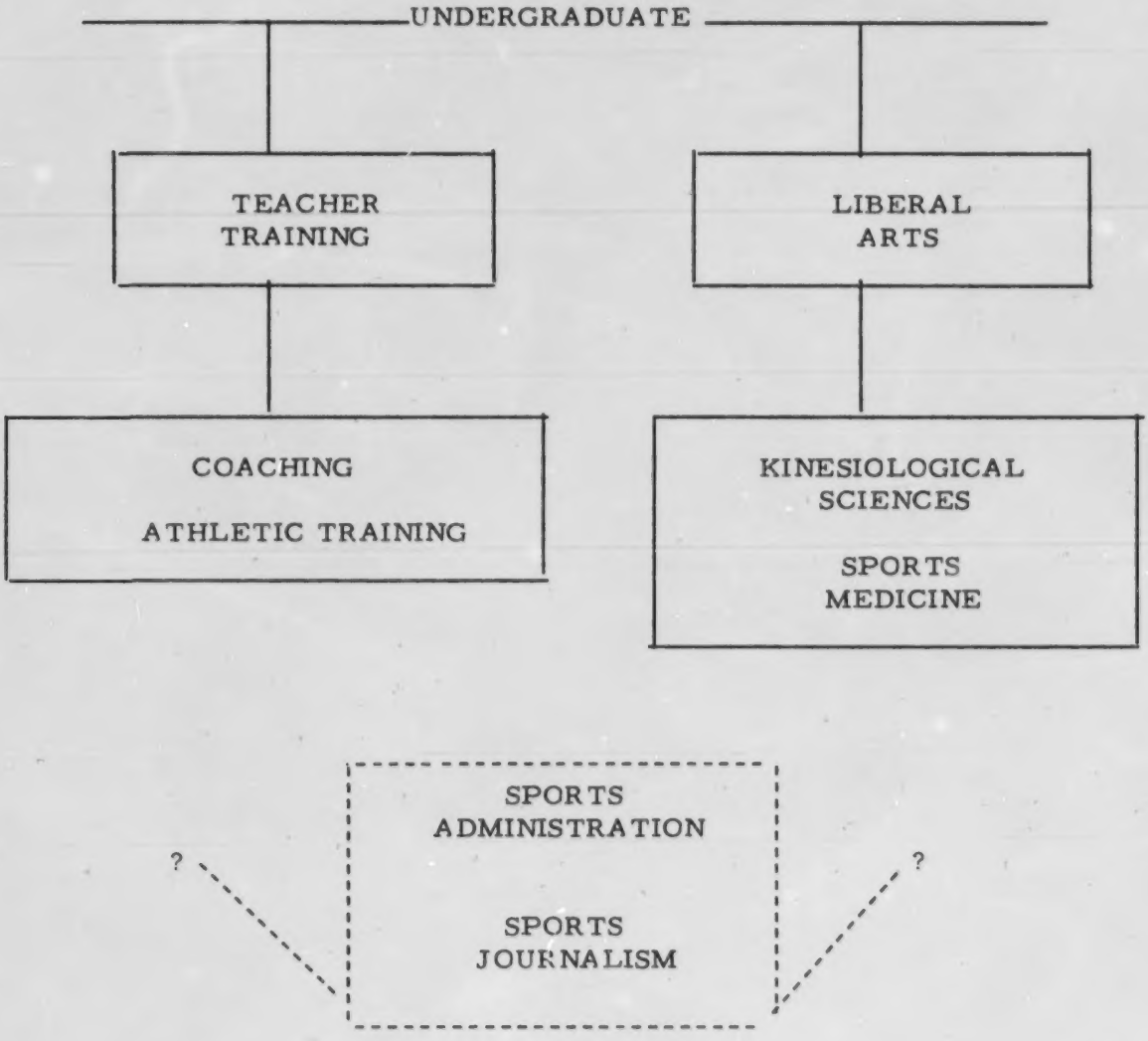
If physical education is to take its rightful place beside the arts, humanities, and sciences, we must develop and then organize the body of knowledge of physical education into a discipline. This can best be accomplished by moving our undergraduate programs in the direction of a scholarly, empirically based discipline. (Massey, 1975) Failure to establish degrees in physical education, other than the teacher certification degree, may seriously impair the future of physical education. According to William L. Smith, Director of the Teacher Corps, The American Association of College of Teacher Education faces several serious problems, the most important one being the abolishment of all undergraduate teacher education programs in the next decade and the granting of Master's degree equivalency for in-service programs exclusively. (Smith, 1975)

It behooves us therefore to organize our programs so students spend more time studying the subject matter of physical education, This can be accomplished through three basic methods. First, a college or university can leave the teacher training program intact and add additional courses in physical education with the result that students have few if any electives in the program. Second, the program in physical education can be strengthened to provide the student with several opportunities. If the student desires to be a teacher, it would be necessary to attend a fifth year to complete certification requirements. Third, the name of the department could be changed and the program could be completely restructured to reflect disciplinary objectives.

As in all major universities, we constantly are evaluating and hopefully inproving the physical education curricula. This past semester we added a 19-hour concentration in coaching, even though the State of Maryland does not have coaching certification. Currently, we are working on establishing the course work and practical experience necessary to attain athletic training certification in the teacher training program. Also, we have a committee working to establish within the Kinesiological Sciences degree program, an option in Sports Medicine, hopefully leading to certification as an Exercise Technician and Exercise Leader.

As of this date, we are undecided as to where to place an option in Sports Administration and Sports Journalism/Communication. (Figure 3). We already have the Sports Administration program on paper, and currently several students are pursuing this degree in what we call our "Individual Studies Program: which is a contract program administered by the Dean of Undergraduate Studies.

Figure 3. SPORTS ADMINISTRATION/COMMUNICATION DILEMMA



There is one Problem which must yet be addressed. To the students the title "Kinesiological Sciences" depicts the study of science which seems to turn some students off. Should undergraduate students pursuing options in Sport Administration. Sport Journalism, and Sport Studies be required to complete the anatomy and biology background and the phsyiology of exercise and kinesiology courses currently required in our teacher preparation programs? We are finding that many students desire to pursue specilaties in Sports Administration and so forth, but they do not believe the "science" aspects of physical education are germane to these options. Hopefully, time will aid in the deliberation of this issue and some concensus will be reached.

The future of physical educat ion is dependent upon those preparing physical educators to establish, recognize and accredit only quality programs, so that we can rightfully take our place beside the other recognized disciplines.

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SECTION III. PROTOTYPES OF PROGRAMS
Specific Vocational Programs

8. An Interdisciplinary Professional Preparation Curriculum in Physical Education

J. William Douglas

For more than a century professional preparation in physical education has existed in large measure to identify a plethora of physical activities and related theory courses organized into a syntactical program designed to prepare teachers for the elementary and secondary school. Unfortunately, during this period, little, if any, attention was given to careers other than teaching. Programs continue to represent the accretions of our history more than a rational concern for contemporary needs. Today, it is imperative that our profession turn its sights toward more far-reaching directions - toward alternative careers.

For those who would doubt the wisdom of such a change, one is reminded of the national situation which has direct implications for our profession. There is a declining interest in pedagogy and a demographically reduced market-place for our graduates that continues to decrease significantly each year. Less and less influence is enjoyed in the allocation of financial resourses which is rationally justified in terms of the general demand for education's function. The academic preparatory work for teaching is increasingly perceived as weak and, perhaps, non-relevant not only by lay persons but many within the teaching profession itself. Very plainly, capital "PE" Physical Education is in trouble.

The numbers of students entering physical education major programs are decreasing at many institutions. Teaching positions available each year are significantly fewer than the graduates (probably by seventy-five per cent). Funding for pedagogical research related to the profession, excepting a few specialized areas, is almost non-existent. Last, and certainly not least, programs often lack the substantive content necessary for graduates to attain and/or successfully assume a teaching position. In short, the eras of the quest for academic disciplinary status and/or accountability have achieved little more than confusion.

Recognizing this dilemma and the corresponding gravity of the situation facing its graduates, the faculty in the Department of Professional Physical Education at West Virginia University (WVU) in 1972 began assessing its program. It was concluded that the traditional orientation, i.e., preparation of elementary and secondary physical education teachers, was in need of massive reform. While it was not the intent to eliminate or qualitatively reduce the existing teacher preparation curriculum, it was strongly felt that within physical education's parameters there were other career opportunities in need of exploration. After much discussion among the physical education faculty as to possible alternative careers, numerous exploratory investigations involving personnel in sport related vocations, and considerable inquiries

with faculty in symbiotic academic units on campus, an interdisciplinary, non-teacher certification, baccalaureate degree program was developed.

In order to offer a new program, it was necessary to submit the proposal for review and approval through the bureaucratic process at WVU, e.g., Faculty Senate Executive Committee and Faculty Senate. Once approved it was forwarded to the West Virginia Board of Regents for their scrutiny. Fortunately, the new program did not necessitate additional funding, and the program was ultimately approved in 1974. It is strongly suspicioned that had the program necessitated new faculty positions, additional staff, expanded facilities, and new equipment, the proposal would have been rejected. This suppostion is made due to the Board's reluctance to approve new programs necessitating additional funding in an attempt to counteract inflationary trends in higher education in West Virginia.

ALTERNATIVE CAREER PROGRAMS

Undergraduate curricular tracks at WVU were implemented initially in 1975-76 in the following areas: sport marketing and retailing, sport management, sport writing (newspaper), sport broadcasting (radio and television), sport physiology, sport social-psychology, and athletic training. Students are prepared with knowledge and skill, contingent upon their specialized academic preparation, for a variety of positions. Students are also prepared with exit competencies necessary for graduate study in medical related professions, e.g., physical therapy, sports medicine, and athletic training; physical education e.g., exercise physiology, sport sociology and psychology, biomechanics, and sport administration; business; journalism, and other academic areas with content potentially related to sport. In addition to the preceding curricular areas, programs are presently being developed in aquatics, recreational sport, dance, sport behavioral counseling and geriatric kinetics.

Since the inception of the program, there have been two curricular areas that have been suspect, i.e., sport physiology and sport social-psychology. Faculty introspection suggests that these programs need to be reconsidered since they have had few students enrolled and were not preparing students with the necessary exit competencies to qualify them for employment in their specialized area. Therefore, the sport physiology track is being revised to include a greater emphasis on an evaluation of the functional capacities of physical conditioning; the sport social-psychology track is being redesigned into a sport behavioral counseling program. Both tracks will likely become a five year program and culminate with the awarding of a Master's degree.

EMPLOYMENT POTENTIAL

In many alternative careers, employment opportunities are unlimited; in others, the situation is speculative. The following is an assessment of

of the employment situation in the alternative career professional preparation areas:

Sport Management:

Within all professional and collegiate sport organizations, there are numerous types of managerial and related positions. These include business managers, facility managers, ticket managers, fund raisers, etc. Additionally, there is a plethora of potential positions with commerical sport centers. As an example, the racquet and gymnastic phenomenon has resulted in a boom in the construction of racquet and gymnastic centers throughout the country. A similar growth in health spas is also occurring. Many spas as well as sport centers, however, have faltered financially due to the lack of managerial expertise. Therefore, the potentiailty for employment of graduates with sport and management competencies has been enhanced.

Sport Writing

The opportunity for employment as a sport writer with a nationally syndicated newspaper or magazine is somewhat limited for the recent recipient of a baccalaureate degree with competencies in this area. Positions are also available with college or university sport information departments, with public relations department of professional and amateur sport organizations, and with local newspaper. Competetion for these positions is, however, quite keen due to the number of individuals desirous of procuring such positions.

Sport Broadcasting

The radio and television media at national and local levels offer rewarding employment opportunities even though the number of positions available are minimal. For women and racial minority groups, the possibility for employment has been enhanced due to federal legislation. While graduates in these areas may aspire to occupy Curt Gowdy's or Phyllis George's position, this is not likely to occur until the graduate has gained additional experience with local radio or television stations.

Sport Physiology

As a result of the increased interest of the nation's populace in physical fitness as well as recognition by the medical profession of the need for exercise physiologists to aid in preventive medicine and rehabilitation, positions are now available. Preventive medicine (fitness) clinics such as those in Dallas and Atlanta have received considerable national notoriety. Similar clinics exist throughout the country generally in conjunction with medical hospitals, industrial enterprises, and Y's. Most professional athletic teams have an exercise physiologist affiliated with their programs.

The most phenomenal growth for employment opportunities in this area, however, has resulted from the influx of health spas throughout the country. Almost every city of any consequence has such an operation. Unfortunately, these "health clubs" generally lack competent instructors. It is felt, however, that health spas or clubs are making an attempt to improve their image among the medical profession and other segments of the community by employing individuals who can provide scientifically-sound exercise programs. In the event state legislation is passed to insure adherance to licensure (certification) of employees, this will result in increased employment potential for exercise physiolgists.

Athletic Training

There is a need for a certified athletic trainer to be associated with every school and college or university athletic program. Unfortunately, this need is not presently being met particularly at the secondary level. A recent study of the National Athletic Trainers Association (NATA) indicates there are only forty-seven undergraduate and five graduate NATA professional preparation curricula throughout the country and only 1,407 certified athletic trainers (Donley, 1978). With less than 300 athletic trainers becoming certified each year, it would be impossible to fill these positions (approximately 7,000)even if monies were appropriated to do so.

Many graduates from athletic training curricula are furthering their education by pursuing a graduate degree in physical therapy or in physical education with an emphasis in physiology or sports medicine. Unfortunately, for those individuals who complete such programs, most do not become athletic trainers for interscholastic athletic teams where they are desperately needed. Instead, they are frequently employed by intercollegiate or professional sport organizations.

For those individuals desirous of procuring a position with an interscholastic program, it is strongly recommended that they become certified to teach in a subject specialization other than physical education due to the lack of available positions in this area. This will enhance their possibilities for being placed in a school system.

Additional Areas

Employment potential also exists in recreational sport, aquatics, dance, and sport behavioral counseling. In projecting the job market for 1970-1980, Changing Times (June, 1972) reported that employment in the recreation field will increase by nearly eighty per cent, an increase second only to the field of computer programming. Community and commercial recreational centers offer excellent opportunities for individuals who are competent in aquatics, dance and recreational sport activities. Noteworthy of these centers are those designed for the geriatric population. With a population of twenty-two million over sixty-five in 1975 and an anticipated thirty million in 2000, the potential for leisure services abounds. Many large municipalities employ a fill-time aquatic expert (coach) for their

competitive aquatic programs; others employ such as individual on a part-time basis. Commerical dance studios and city and commerical recreational centers, while not innovative developments, are also increasing in number. Another undeveloped, but potentially lucrative, employment market exists in the area of sport behavioral counseling. While considerable concern has been manifested for athletic trainers (for physical prevention and care), little concern, (if any) has been expressed for sport behavioral counselors. Yet, it is recognized that the sport participant's psychic may be as instrumental for success as is one's physical condition. Furthermore, the potential for long-lasting psychological damage is as great as with physical injuries. Arnold Beisser's The Madness in Sport lends credibility to this assertion (Beisser, 1967, 1978).

While it is recognized that there are other potential employment areas, those previously identified reflect the extent to which WVU has explored. It should be recognized that geographic location, the market-ability of graduates, and the availability of faculty and financial resources were considered when developing the present alternative career options.

EMPLOYMENT DETERRENTS

Numerous potential employment areas have been identified. Unfortunately, the employment of graduates in many of these areas is not as encouraging as it should be. It is felt this can be attributed to the lack and/or relative newness of professional preparation curricula in our colleges and universities related to alternative careers; to the failure to adequately communicate (publicize) to potential employers the availability of competent graduates in these areas; to the lack of state regulations (policies or laws) governing employment in many of these areas, e.g., athletic training, health spas, geriatric centers, etc.; to the practice of employing personnel who lack formal specialized preparation, e.g., an English graduate as a sport writer; and to the employment of former athletes and/or coaches for positions in which they are only semi-competent.

It is felt that the actual employment situation in all alternative careers will be enhanced in the future as many of these obstacles are overcome. It is imperative, however, that professionals who plan and graduates who complete these programs be realistic in their aspirations. Graduation does not insure immediate employment in the desired career or at a desired level. If employment ensues in the desired career, in most instances graduates will begin at an "apprectice" level. If it does not, graduates will have to seek employment in other areas (hopefully ancillary) until which time an opportunity becomes available.

EMPLOYMENT OF WVU GRADUATES

To make a judgment concerning the realization of the employment potential in WVU's interdisciplinary, alternative career program in physical education is difficult due to its relative infancy, i.e., implemented in 1975. Furthermore, it is fraught with numerous deterrents as previously identified.

To date there have been thirty-one graduates. Of this number, eighty-five per cent are employed in the career for which they prepared. Unfortunately, these data are misrepresentative in that 100 per cent of the athletic training graduates have been employed. Employment of graduates of the remaining curricular tracks is not (at this time) encouraging. To date two have been employed in sport retailing, one in sport broadcasting, two in sport reporting, and one in sport physiology.

In a national survey conducted by this writer, eighty per cent of the respondents (N=76) indicated that professional preparation for alternative careers in physical education has a promising future. Yet, in this same study, the overwhelming majority of institutions responding indicate they are having difficulty placing graduates in these new career options. (Douglas, 1978) As discouraging as these findings are, it is realized that similar problems are occurring for graduates certified to teach and in quest of the initial teaching position.

It is felt that as the "employment deterrents" are overcome there will be a positive concomitant affect on the marketability of graduates professionally prepared in these "new" alternative career options.

PROTOTYPE PROFESSIONAL PREPARATION CURRICULUM

The professional preparation for students completing an alternative career curriculum will vary from institution to institution. At West Virginia University the interdisciplinary curriculum is composed of six facets each of which constitutes an integral segment of the total program. If is felt that this curriculum can serve as a prototype for other institutions considering the developing of an alternative career curriculum.

General Studies

Students are permitted a great deal of latitude in selecting courses in the required areas of humanities, social sciences, and physical sciences. They are required to complete two semesters of written composition. It is felt these courses meet students' needs and interests and, correspondingly, enlarge the range of their intellectual competencies and cultural curiosities. This block, consisting of forty-two semester hours, is required of all WVU

students and constitutes the university's Core Curriculum.

Sport and Physical Activities

It is necessary for all students to elect a variety of courses in aquatics, gymnastics, team sports, individual and dual sports, and dance (optional). Students are required to complete twelve hours with a minimum of one course to be taken from each area. Almost without exception students elect additional courses in team sports and individual and dual sports in order to extend their awareness of and competencies in a vast array of sports. Since the emphasis is on developing psychomotor, cognitive, and affective skills (and not teaching methodology), all students (teacher education and alternative careers) complete this cadre of courses.

Physical Education Core

All students are required to complete a core (five three-hour courses) of disciplinary-related courses including sociology and psychology of sport, history and philosophy of sport, motor learning, kinesiology, and exercise physiology. These courses are designed to acquaint students with the underlying academic basis for physical education and, as such, are germane to all physical education sponsored curricula.

Athletic Emphasis

Students are required to complete three-hour courses in athletic training, athletic coaching, and sport administration. Inasmuch as all alternative career tracks at West Virginia University (excepting dance which is presently being developed) are related to sport, it is felt that a knowledge of these areas is essential. Unique features of these courses include a laboratory experience in athletic training and a coaching field experience with an interscholastic and intercollegiate athletic team (where students assist the coaches within the limits of the students' capabilities). Students enroll in these courses after completing the physical education core and activity courses.

Interdisciplinary Areas

Students develop competencies in their complementary career related professional preparation area by completing an aggregate of courses (twenty-four to thirty hours). The academic units involved include the College of Business and Economics; School of Medicine; School of Journalism; and the Departments of Anatomy, Biology, Physiology, Psychology, Recreation and Parks, and Sociology. In all areas the courses prescribed are a direct resultant of faculty from physical education having collaborated with faculty representatives from the cooperating units to establish needed competencies for a given career and the appropriate courses to enable these competencies to be realized. These courses are to be completed prior to the internship.

Internship

The most innovative segment of this curriculum is the internship. This one semester experience provides a unique opportunity for students to synthesize knowledges and skills amassed from the academic areas in an actual on-the-job situation. The internship includes learning experiences congruent with the objectives individually designed for each student's involvement. In many instances, a variety of experiences are provided in order that the intern be exposed to the multifarious aspects in a program area.

The internship has been a three-hour course (fifteen contact hours per week) without financial remuneration in which students complete the semester prior to graduation. Students must have completed all required courses prior to this experience and have an accumulative grade point average of 2.25 or better (based on a four-point scale). Inasmuch as students, almost without exception, are taking additional elective courses to obtain the minimal number of hours required for graduation (128), internship placements have been located in the local community.

Effective with the 1978-79 academic year the internship will be increased to variable credit (three to fifteen) with the likelihood of financial remuneration and placements (assignments) with internship sponsors located beyond the local area. Faculty advisors will recommend that students complete a full-time (fifteen hours) internship experience. It has been felt that this increase in hours (credit and contact) will enhance the educational potential of this experience.

Internship opportunities. Examples of internships included in WVU's alternative career curriculum are as follows:

a. Sport marketing and retailing. These include assignments of golf and tennis pro shops, sporting goods salesmen, and sporting goods stores.

b. Sport management. These include assignments to intercollegiate athletic administrators, golf and racquet clubs, health clubs, and professional athletic teams.

c. Sport writing. These include assignments to local newspapers, WVU student newspaper, college sports information offices, and professional athletic public relations offices.

d. Sport broadcasting. These include assignments to television and radio stations.

e. Sport physiology. These include assignments to the WVU Human Performance Laboratory and health clubs.

f. Athletic training. These include assignments to the WVU athletic training staff and interscholastic and professional athletic teams.

Internship difficulties. Numerous difficulties have been encountered since the inception of the internship program. They are:

a. Availability of sponsors - Since WVU is not located in a metropolitan area, the availability of sponsors is not abundant. Therefore, it has been necessary to seek sponsors away from the local area. Unfortunately, there are not sufficient monies to support faculty to be "on the road" to procure desired internship sponsors.

b. Coordination - Due to the rapid growth of the alternative career program, it has become impossible for one faculty member to adequately coordinate the internship experiences. Unfortunately, there has not been a concomitant increase in monies to employ faculty and/or staff for this responsibility.

Internship positives. The positive aspects of the internship program are:

a. Supervision - Internship sponsors have been chosen with much discretion. While, in most instances, the supervisors are not directly associated with WVU, they have assumed a professional attutude toward this critical function.

b. Educational benefits - Students have found this culminating experience to be their most rewarding educational experience.

c. Employment - Many internships have resulted in the intern being retained in a full-time position with the sponsor of this experience. Others, as a result of personal contacts made during the internship, have used this as a "springboard" into a position.

Alternative Career Model

In this illustrative model, the six facets of the alternative career curriculum at West Virginia University distributed throughout a student's four years are depicted.

	Freshman	Sophomore	Junior	Senior
General Studies				
Humanities				
Physical Sciences				
Social Sciences				
Written Composition				
Sport and Physical Activities				
Aquatics				
Dance (optional)				
Gymnastics				
Individual and dual sports				
Team Sports				

	Freshman	Sophomore	Junior	Senior
Physical Education Core		———	———	
Exercise physiology				
History and Philosophy of Sport				
Kinesiology				
Motor Learning				
Sociology and psychology of sport				
Athletics			———	———
Administration				
Athletic training				
Coaching				
Interdisciplinary Areas		———	———	
Business and economics				
Journalism				
Physiology				
Psychology				
Sociology				
Internship				———
Athletic training				
Sport broadcasting				
Sport management				
Sport marketing and retailing				
Sport physiology				
Sport social-psychology				
Sport writing				

CURRICULAR INFORMATION

To facilitate a greater understanding of the curriculum, it is examined without reference to a specific alternative career track.

Students

Presently, sixty students dispersed over four years are enrolled in one of the existing alternative career tracks. This number represents fifteen per cent of the total undergraduate enrollment in physical education. The remaining students are enrolled in a teacher preparation program even though many of these will not become certified to teach due to insufficient grade-point

average, change of career goals, etc.

Due to the lack of knowledge related to the availability of alternative career professional preparation tracks at WVU on the part of high school guidance counselors, physical education teachers, and athletic coaches, the vast majority of students who enter the alternative career curriculum do so after enrolling at WVU. Initial information generally is provided by undergraduate advisors, by the instructors in the orientation (introduction) class in which students enroll during their first semester, or by upper-class students. The only significant exception is the athletic training curriculum. As a result of state and national publicity it has received, many students are aware of this program prior to enrolling.

Informational fliers (in addition to the university's catalog) have been developed to publicize the availability of such programs and are being distributed to high schools in the university's service area.

While many students now in the curriculum had originally intended to become certified to teach, it is felt this will change in the near future as the public becomes aware of the availability of such programs and the potential for employment in these specialized areas is further developed.

Admission and Retention

Admission into all curricular tracks (excepting athletic training) is open to all students accepted for admission into WVU. Due to the excessive number of applicants for the limited number of vacancies in athletic training (ten to twelve), it is necessary to incorporate a selective admission policy.

Students are retained in all tracks as long as they remain within the university's allowable deficiency performance level. It is necessary, however, for students to have an accumulative 2.25 grade point average with a minimum 2.0 in physical education and their complimentary interdisciplinary area to be eligible for the internships.

Admission and retention policies for the alternative career program are the same as the teacher certification program.

Faculty

Since the alternative career program incorporates many of the courses offered in the physical education teacher certification curriculum, it was not necessary to employ additional faculty with specialized qualifications. Similarly, courses required in the cooperating academic units are the same courses required of their major students. Therefore, it was not necessary to employ additional faculty or to add additional courses.

Administration

The alternative career curriculum is located administratively in the Department of Professional Physical Education (in the School of Physical Education). Department chairpersons in the interdisciplinary areas are consulted with respect to scheduling, course changes, etc.

Cost

This interdisciplinary program did not necessitate additional new courses (excepting the internships). Consequently, new faculty and staff and additional equipment and facilities were not necessary. The only additional costs for such a program are those involved in procuring and coordinating the internships.

ROLE OF PHYSICAL EDUCATION IN PROFESSIONAL PREPARATION

Based on the assumption that professional preparation in physical education, as generally interpreted by colleges and universities, is designed for teacher certification and, as such, prepares its graduates for entry into an immensely overcrowded marketplace, it is necessary to reconsider the philosophical position undergirding our profession. During the past five years, evidence of a concern for professional preparation in the direction of alternative careers has emerged. Undergraduate programs have been initiated at approximately fifty institutions. Professional preparation conferences have been conducted in numerous states and districts and at the national level with an emphasis on alternative career options. Additionally a task force on new options in undergraduate professional preparation has been established by the National Association for Sport and Physical Education.

The potential for physical education as a contributor to professional preparation in the many and varied alternative career options is enormous. It is felt that subject matter content generally accepted as necessary for a quality physical education program (excepting the teaching methodological courses), when combined with a complementary academic unit, will provide a unique and viable interdisciplinary professional preparation, alternative career curriculum. Furthermore, it is felt that it would be impossible for physical education units to prepare students in a variety of these areas without support from other academic units due to the anticipated lack of faculty expertise. To employ faculty with such expertise would be financially prohibitive.

Many alternative career programs sponsored by physical education units have limited their focus to the field of sport with its many ramifications. It is, however, realized that within physical education there exists other alternatives, e.g., dance.

While many individuals occupying positions included in the alternative career areas are not professionally prepared in a specific area, it would be foolish to assume that they are incompetent. Many ex-athletes (as examples) are and will continue to be excellent sport broadcasters or sport salesmen. Yet, it would be as foolish to assume that they would not be more competent if they had been academically prepared in sport broadcasting or sport marketing. It is one thing to have played a sport; it is something else to understand it (sport) and to be able to render immediate expertise and service to an employment endeavor. Graduates from an interdisciplinary, alternative career, professional preparation curriculum such as WVU's will adequately prepare its graduates to assume such responsibilities.

SUMMATION

It is now being realized that within the inexact, umbrellaistic parameters of physical education there exists demonstrable evidence of alternative careers that have been and are continuing to be developed. The extent to which professional preparation curricula are meaningful and acceptable for future development depends upon (1) the innovativeness and perceptiveness of college and university faculty and administrators who are interes t ed in and/or responsible for curriculum planning and (2) the societal dictates for career alternatives. It is hoped that by 1988 teacher certification will be identified as an alternative career in physical education.

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9. Commercial Physical Education

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University of Utah

Sandy Cavanaugh graduated from the University of Utah with a Commerical Physical Education major in June, 1977. She and other seniors in this area constituted ten percent of the total physical education graduates. Joining the throngs of new job seekers, Sandy interviewed with a number of organizations including several health spa's. She decided to accept employment with a new sports mall in Salt Lake City that supported the following facilities:

> indoor and outdoor tennis courts, basketball gymnasiums, handball and racquetball courts, swimming pool, athletic and spa areas, whirlpools, steam rooms, saunas, and an outdoor jogging track.

She and several other sports specialists are now responsible for developing various activity programs for sports mall members and their guests.

The day to day job involves individual and group instruction in sport activities such as tennis, handball, racquetball and swimming; consultation on individual programs for cardiovascular fitness, muscular strength and endurance and development of individualized weight control program. Sandy spends considerable time talking with prospective members concerning the overall program and financial arrangements for club membership. She is involved in business procedures centered around the mall operation.

What are the competencies needed by Sandy Cavanaugh and future physical educators who will be dealing with new challenges in the health spa, sports mall, and private business industries? How will program offerings geared toward teaching children and youth need to be changed to serve a population consisting of youth, teenager, adults and senior citizens? Can a job market be developed to employ competent graduates who have specialized in commerical physical education?

In 1972, a Physical Education Division curriculum committee at the University of Utah addressed some similiar problems. Housed in the College of Health along with programs in Health Science, Leisure Studies, Nutrition and Physical Therapy, the Physical Education staff was interested in investigating some possible alternatives to the teacher preparation program. Prior to this time, approximately 98 percent of the physical education majors graduated with teacher certification with the intention to teach and coach in the public schools.

The idea of an adult fitness specialist began to take shape as the result of an interview with a young man who was employed in a local health spa. In pursuit of an undergraduate physical education major, the man believed he could offer much more to his job with a stronger emphasis in the bio-mechanical sciences. At his request, a special program was designed to meet his needs.

After considerable discussion, the physical education curriculum committee decided to investigate the possibility of offering a physical education major that would prepare individuals for employment in the health spa industry. In doing this, the committee perceived a number of actions necessary to reach a decision: (1) communication with the health spa industry to ascertain the potential employment opportunities; (2) determination of the competencies needed by individuals being educated as adult fitness specialists; (3) consultation with departments offering auxilliary courses (particularly business) to determine pertinent course offerings; and (4) revision of current programs in light of established objectives.

A representative number of local and national health spa chains were contacted to determine the feasibility of the proposed program. The committee received a mixed reaction - both positive and negative. One national health spa chain located in Salt Lake City showed considerable interest in the program. Though it was apparent from the beginning that a number of unique problems existed program plans continued. The curriculum described in the following paragraphs constitutes the work of the original committee and the revisions adopted by the Division of Physical Education during Spring Quarter, 1978.

To graduate with a major in physical education, a student must complete the following:

a) Required Core Professional Courses
b) Two tracks (areas of specialty) and
c) Liberal education requirements

For the purposes of this paper only required professional courses and areas of specialty will be described.

Required Professional Courses (32 Hours)

Biology 101	General Biology	5
Biology 201	Introduction to Physiology	5
Health Science 195	First Aid and Emergency Care	4
Physical Education 199	Introduction to P.E.	5
Physical Education 208	Kinesiology	5
Physical Education 366	Physiology of Exercise	5
Physical Education 370	Sport Skill Analysis	3
Physical Education 382	Special Physical Education	3

In addition to core requirements students must choose two tracks (areas of specialization) from the following: Athletic Training, Aquatics, Coaching, Commercial Physical Education, Dance, Elective, Gymnastics, Lifetime Sports, Special Physical Education, and Teaching. The following table summarizes the track requirements.

TABLE I. PHYSICAL EDUCATION MAJOR

TRACK	TOTAL HOURS REQUIRED	REQUIRED COURSES	ELECTIVE COURSES	OTHER
Athletic Training	32	(26hrs) Nutrition Common Medicines of Man, Anatomy Training Room Proceed., 2 Coaching classes, Medical Aspect of Injuries Preventive Exercise Procedures, Laboratory	(6hrs) Selected from 8 courses	Students completing this track must choose teaching as a second track
Aquatics	20	(13hrs) Aquatic Program, Diving, Physical Fitness, (aquatics), Water Safety and Pool Mgt., Coaching, Swimming and Diving, Laboratory Experience	(7hrs) selected from Water Polo, Scuba Diving, Life Saving Sailing, Kayaking, Exercise Body Cond., and Wt. Training, Train. Rm. Procedures	
Commercial	(65)			
Business	28	(16 hrs)	(12 hrs)	An additional track is not required
Physical Education	37	(17 hrs)	(20 hrs)	
Dance	20	(14 hrs) Folk, Square and Ballroom Dance Skill and Methods, Laboratory Experience, 6 hrs of either Beginning Modern Dance or Beginning Ballet Techniques	(6 hrs) selected from Tap Dancing Advanced Folk, Square, and Ballroom Dance, Modern Dance and Ballet	

TRACK	TOTAL HOURS REQUIRED	REQUIRED COURSES	ELECTIVE COURSES	OTHER
Elective	18-24	One-third of courses must be upper division	Student creates own course of study under the direction of an advisor	Course of study to be approved by department chairperson
Gymnastics	18	(12hrs) either Men's or Women's Gymnastics, teaching gymnastics, coaching gymnastics, judging gymnastics, laboratory experience	(6 hrs) selected from Training Rm. Procedures, Sport Psychology, Psychology of Motor Learning, Exercise and Body Mechanics, Modern Dance and Ballet	
Lifetime Sports	20	(11-14 hrs) Archery, Bowling, Golf, Badminton, Tennis, and Racquetball, Body Mechanics, Exercise, and Weight Training, Outdoor Adventure workshop	(6-9 hrs) selected from Handball, Ice Skating, Skiing, Fencing, Horseback Riding, Cycling, Rock Climbing Kayaking, Canoeing, Officiating, Psychology of Sport	
Special Physical Education				
Option 1	24	(18 hrs) P.E. for Elem. Schools, Special P.E. Perceptual Learning Theories and the Exceptional Child, P.E. for Ind. with Chronic and Permanent Disabilities Seminar	(6 hrs) chosen from: Preventive Exercise Procedure Body Mech., Ex. and Wt. Tr., Tests and Measurements	Choose Teaching Track as second track

TRACK	TOTAL HOURS REQUIRED	REQUIRED COURSES	ELECTIVE COURSES	OTHER
Special Physical Education Option 2	26	(20 hrs) P.E. for Elem. Schools, Sp. P.E., P.E. for Ind. with Chronic and Permanent Disabilities 8 hrs Spec. Education	(6 hrs) chosen from Basic Skills and Lead-up Games, Rhythms, Perceptual Motor Learning Theories and the Execption-al Child	Special Education Certification
Teaching	37	(37 hrs) Sophomore field experience, softball, track and field, field sports, volleyball, basketball, archery, bowling, golf, tennis, badminton. racquetball, gymnastics, folk, square, and ballroom dance, P.E. El. Sch., Adm., and leadership, Org. Tests & Measurements Teaching Methods	(none required) Electives may be chosen from a wide variety of skill officiating, methods and coaching classes.	

Commercial Physical Education Track

Students like Sandy Cavanaugh who complete a four year program in commercial physical education have considerable choice in program planning. The program is interdisciplinary in nature. Course offerings may be selected from business, health science, leisure studies, nutrition, and physical therapy.

Twenty eight hour business component is comprised of sixteen hours of required courses and twelve hours of elective courses.

Required courses include:

Elementary Accounting 1, 2	8 hours
Introduction to Computer	3 hours
College Algebra	5 hours

Electives are chosen from one of three areas:

Finance

Business Finance	4 hours
Risk and Insurance	4 hours
Computer Science Programming	4 hours

Management

Business Law	4 hours
Principles of Management	4 hours
Small Business Management	4 hours
Office Systems Management	4 hours

Marketing

Principles of Marketing	4 hours
Introduction to Advertising	4 hours
Sales Management Decisions	4 hours

The physical education program segment is divided into required and elective courses. Required courses (14 hours) include core courses mandatory for all physical education majors plus (1) a sophomore field experience designed to acquaint students with the realities of their chosen field early in their educational experience; (2) physical education activity classes including Jogging, Aerobics, and Exercise. Body Mechanics and Weight Training (3) a physical therapy course in Preventive Exercise Procedures; (4) the Fundamentals of Nutrition; and (5) a Personal Health class.

Twenty hours of elective courses may be selected from (1) physical education activity classes such as Basic Physical Fitness, Weight Training Racquetball, Hatha Yoga, Archery, Bowling, Golf, Tennis, Badminton, and Swimming; (2) physical education theory and methods courses including Water Safety and Pool Management, Commercial Physical Education, Tests and Measurement, Medical Aspects of Injury, and Psychology of Motor Learning, and Individual Study, (3) related areas including Health Care in the United States, Fundamentals of Speaking, and Commercial Recreation.

Employment Opportunities

Commerical physical education is a relatively new and exciting field. "American's fitness renaissance" (Keelor 1976) has opened new avenues of employment possibilities for young men and women. Employee health and fitness is a major concern of corporation management. More than three

hundred companies now employ fitness directors and hundreds of others have more modest programs. Sports malls (are prominent in every state) are emphasizing sports skill development, recreational and fitness activities. Middle and upper income level adults are drawn to the more than 800 health spas and health clubs in business across the country. Community agencies such as fire fighters and police officers are becoming more concerned about keeping personnel physically fit. In 1978, (Whitworth 1978) pointed out this need as it related to the Salt Lake City Police Department. It should be mentioned at this point that although numerous employment possibilities exist, a number of problems cloud the picture.

The following points bear consideration:

1. Unlike the excellent communication established between public schools and colleges in reference to job placement, contact between institutions of higher education and the business community are still at the neophyte state. Graduating seniors must aggressively seek job openings and in some instances create their own opportunities.

2. Health spa's and health clubs may not utilize trained fitness specialists to the best advantage. As was pointed out in an article (Henschen 1975) health spas need to be tuned into the knowledge the academic community has concerning fitness. Fitness companies will need to commit themselves to continuous programs for improvement and quality control of personnel and services.

3. Placement opportunities will vary according to locale. However, whereas public school employment is available from country town to large city, big private companies, health spa's, and sports malls are usually located near large population centers. Those seeking employment must be cognizant of this factor.

If the current nationwide trend toward involvement in adult exercise and fitness programs continues, the future need for more individuals with expertise in this area is certain. In addition, the prospect of improving health club programs may come through state or government legislation. Thus, as more qualified people assume leadership roles in the health spa industry, commercial physical education graduates should find expanding opportunities for meaningful employment.

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10. Community Physical Fitness Certification
A Non-Teaching Option in Physical Education

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The Physical Education Department at California State University, Long Beach initiated a non-teaching option in Physical Education during 1971. The program was designed to meet the needs of a request by the National YMCA office to provide physical directors who have s trong professional education program in physical fitness activities for purposes of developing fitness programs. The department designed a non-teaching option presented it to the YMCA Directors and was sanctioned as a training site for physical directors.

From this beginning the program has expanded to provide professional leadership in YMCA's, YWCA's, Boy's and Girl's Clubs, commercial health spas, specialized sport facilities and business and industrial sport and fitness programs.

During the initial stages of this program job placement was minimal and annual salaries were below the starting point of those majors going into educational systems. Recently job placement has been increasing at a rapid pace and the department office receives job announcements requesting physical directors on a regular basis. At the present time we have placed approximately 25 students in positions of leadership directing physical fitness programs and the salary range is from $11,000 to $13,000. Although these positions are on a 12 month basis they are above the starting teaching salaries in most districts.

The program has been a successful addition to the teacher training approach and during the Introduction to Physical Education courses our professors encourage students to pursue the Certificate in Community Physical Fitness as a viable alternative to teaching and coaching in public schools. The basic Certificate requires a major in Physical Education deleting the education course block and substitutes courses in recreation supervision, physical fitness and restoration and organization and administration of community programs. In addition, students pursuing the Certificate take course work in health, communication and behavioral science areas and business and management procedures. The program was initiated by utilizing the interdisciplinary approach encouraged by the university. Faculty from the departments of business, home economics, quantitative analysis, health and recreation were consulted and appropriate courses were included in the Certificate program. No additional resources were required as existing courses from the various departments met the needs of the curricular plan proposed. Although the program is currently a success

it is anticipated that it will continue to expand based on the extensive development of specialized sport facilities.

The following Certificate program lists all the courses and options available for purposes of pursuing the Certificate in Community Physical Fitness.

CALIFORNIA STATE UNIVERSITY, LONG BEACH
PHYSICAL EDUCATION DEPARTMENT
CERTIFICATE IN COMMUNITY PHYSICAL FITNESS

The certificate in Community Physical Fitness is designed to prepare the students for positions of leadership in physical activity programs in the community. Specific emphasis has been placed upon preparation of Physical Directors for the YMCA, YWCA, Boys' and Girls' Clubs, and other non-profit agencies. This certificate also prepares students for placement in commercial health spas, specialized sport facilities and business and industry sport and fitness programs.

Requirements for the Certificate in Community Physical Fitness:

To obtain the certificate in Community Physical Fitness, students must complete the basic requirements for a Bachelor of Arts Degree in Physical Education with the exception of the Education block required for a teaching credential. To pursue this emphasis and receive certification the student must register with a Community Fitness advisor to finalize course requirements.

The following courses are required to complete the certificate in Community Physical Fitness:

PE 346 Conditioning in Physical Education and Athletics or
PE 348 Physical Fitness and Restoration

REC 421 Supervision in Recreation

REC 425 Organization and Administration of Recreation

REC 484 Field Work I

In addition, the student is required to complete at least two courses, with advisor approval, from each of the following three areas:

I. Health, Physical Education, Recreation and Nutrition

HS	210	Contemporary Health Problems
HS	327	Stimulants and Depressants
PE	230	First Aid
PE	248	Advanced Swimming, Life Saving and Water Safety
REC	318	Outdoor Recreation Management
HEC	430	Nutrition and Health

II. Communication and Behavioral Areas

JOUR	270	Introduction to Public Relations
SPCH	434	Community Organization Settings
SOC	335	Social Psychology
SOC	336	Sociology of Small Groups
SOC	345	Juvenile Delinquency
SOC	419	Rural-Urban Trends
REC	340	Leisure in Contemporary Society
ED P	302	Adolescent Development and Learning

III. Business and Management

OS	130	Current Concepts of American Business
ACCT	201	Elementary Financial Accounting
MGMT	421	Management of Small Business Enterprises
MPM	360	Behavioral Sciences - Management
MPM	361	Manpower Management
MPM	464	Managerial Psychology

Six to nine units are to be taken in fieldwork at the community agency.

NON-TEACHING OPTION IN PHYSICAL EDUCATION

For purposes of documenting the desirability of working in the private, commercial, or business and industry setting, the following description of sample fitness sites are examples of where our majors are currently being employed.

The Newport YMCA, located on the back bay area of Newport Beach, California has attractive pool areas and work-out facilities for both youth and adults. This particular YMCA has initiated an Infant Stimulation Program that requires the professional services of well trained individuals who are able to work with mothers and their babies developing motor patterns and fitness activities almost from the time of birth. Activities such as Yoga, Aerobic Dance, fitness activities for executives and the general community are part of the programs offered.

The Hollywood YMCA's old swimming pool area is typical of many facilities throughout the country. Recently they have constructed a new pool and work-out facility which is much more attractive and encourages participation. The physical director has the responsibility of developing individualized programs and counsels with the membership regarding fitness activities. Racquetball has been added to the program expanding the variety of work-out facilities to include more game situations. Roof top jogging while lookingat the Hollywood Hills encourages cardio-respiratory endurance activities while being only a few yards from busy city streets.

The Rockwell Company's recreation park is designed to provide fitness activities for their employees. The facility has work-out areas for both men and women and provides professional leadership including the services of an M.D. working clos e ly with the physical director. The weight room is colorful and attractive. In addition to the indoor facilities the Rockwell Company has night lighted volleyball and basketball courts, tennis courts and a jogging trail that can be used 24 hours a day.

The newly completed Fluor Corporation headquarters building in Irvine, California has an exercise area designed primarily for their executives. This modern office headquarters provides attractive facilities along with professional instruction in designing fitness activities on an individual basis.

Fitness activities are organized in the Occidental Center Building in downtown Los Angeles. Approximately one half of the 5th floor includes a weight room, basketball and volleyball courts and a racquetball facility for their employees. Again, a professional physical director is employed providing information on activities designed to meet the health and fitness needs of those employed at the center.

The newly opened Southcoast Club is where one of our women majors has recently been employed as the physical director. The building is quite attractively designed and should encourage the membership to become regularly involved in fitness activities under the direction of professional leadership. This club is primarily designed for racquetball players, however, it includes weight room facilities, attractive lounges, game areas, meeting rooms, a jacuzzi and an outdoor pool.

A commercial enterprise called the Sporting House is a specialized facility that employs a physical director, an exercise physiologist and an M.D. which enables them to provide stress testing services not always found in other facilities. In addition, there is a food service facility which emphasizes healthful type meals. Although not classified as a health food operation, no alcohol is served and proper diet is encouraged. Again, the attractiveness of the weight room, work-out areas and inclusion of some of the latest equipment encourages members to participate. This facility

provides baby sitting services during the time parents are utilizing the facilities. Indoor half-court basketball and badminton are provided along with an exclusive racquetball facility. The outdoor fitness area includes a 75 foot swimming work-out pool, a running track with signal light timing and sand volleyball courts. The design of this modern facility mimmicks the country club atmosphere. A wood designed locker room area including a laundry facility is available to members. The attractive sauna and jacuzzi provide therapeutic and relaxation activities in addition to the extensive work-out facilities. As mentioned earlier, the employment of the Exercise Physiologist and Medical Doctor allows for extensive medical exams, including stress testing and hydro-static weighing. Complete physical exams are available to members and non-members for a cost of $300. As indicated, the environment is quite different from what most of us who work in the eudcational system are familiar with, however, maybe we can learn from the attractiveness of these facilities and adapt some of the concepts to our school program. Currently we have two girls completing their fieldwork assignments at the Sporting House who will be hired at a new facility which is under construction.

The non-teaching option in Community Physical Fitness Certification is defintely a program that has increased the job options for physical education majors providing a sound foundation for students interested in physical fitness activity leadership.

11. The Professional Golf Management Program At Ferris State College

Lowell V. LeClair
Ferris State College

The Professional Golf Management Program at Ferris State: The only college program sanctioned by the Professional Golfers' Association of America. Students upon graduation are awarded a B.S. degree in business with a major in marketing and twenty-four credits towards the thirty-six needed for membership in the P.G.A.

The program prepares golf professionals, in contrast to professional golfers (the tour player that you see on television). The golf professionals are the business men of golf who serve the amateur golfers of the nation by being teachers, proprieters of golf shops and managers of golf facilities.

A word about the P.G.A. It is the professional association of the golf industry with the primary objectives of elevating the standards of the professional golfer's vocation and promoting interest in the game of golf. The traditional way of becoming a member (since 1916) is accumulating credits by working as an apprentice under a member (one credit per month of service), attending two business school workshops put on by the P.G.A., and passing two written examinations, an oral exam and a playing test. It usually takes about five years to acquire membership.

In its relationship with Ferris State College, the P.G.A. acts in the role of an accrediting agency while the college provides a second avenue for individuals to work towards membership in the Association.

As a college program, the Professional Golf Management curriculum is unique in that it calls for extensive on-the-job work experience under a P.G.A. professional, so it includes, then, an important ingredient of the apprentice concept.

It is a rigorous all-year-round program that also takes approximately five years to complete, but in contrast to the apprentice, a student ends up with his credits for P.G.A. membership and a college degree.

We feel that students in the program are the cream of the crop. They have to be to survive. They must have good grades to be selected, at least a 2.5 high school average, plus math through trigonometry, and they must maintain high grades to stay in.

Also, they must have a golf handicap of eight or equivalent to get into the program, and they are expected to improve to be able to pass the playing test for P.G.A. membership. And all students must come to

campus for a personal interview before admission.

Two classes of fifty are admitted each year: one in September and the other in March. Of the 285 students that have enrolled since the fall of 1975, approximately 200 are still in the program.

Only a fraction of the candidates are selected. There are close to 200 applications for every fifty admitted. Admission to the program usually runs one year in advance to initiating the course of study.

Students presently come from about twenty-five different states, primarily the eastern half of the U.S. It should be noted that this program has the highest percent of out-of-state students of any curriculum at Ferris State.

While students are on campus, they take a full academic load, completing all the requirements for their degree in marketing, which will qualify them for a number of positions in or outside of the golf business.

In addition, they are required to take special courses in turf grass and pest control. Courses in the curriculum from the Department of Physical Education & Recreation are anatomy and kinesiology. Suggested electives in this area are: Planning of Recreational Facilities, Administration of Recreation, Leadership and Programming, and the Psychology of Coaching. Electives that students are encouraged to take from other areas include Food & Labor Cost Control and Food & Beverage Management.

The golf portion of the on-campus program is presented in several ways. First, the curriculum requires four in-depth workshops (thirty to forty contact hours) in golf car maintenance and repair, club repair and fitting, rules and tournament management, and the teaching of golf. In addition, special programs and seminars are presented on regular basis by P.G.A. members and nationally known people in the field. These cover all phases of the golf business from teaching, to merchandise, display, to golf course design. Students have also taken field trips to the Walter Hagen Factory in Grand rapids and P.G.A. Victor in Chicago.

While on campus, students participate in all the usual activities, and they have their own student organization patterned after a chapter of the P.G.A. which organizes a number of activities including golf tournaments.

There are a number of reasons why Ferris State College is the location of the only P.G.A. sponsored program to prepare golf professionals. Ferris is a unique institution with a ninety-five year record of preparing men and women for specific occupations in the world of work.

Ferris has a large and diversified school of business with a

flexibility of philosophy and action. Of the 10,000 students at Ferris, 3,300 are in the School of Business and there was no question of accpetance of this program by the school.

Most of the more than 100 Ferris programs have on-the-job work experience as part of the requirements, so they are experienced in the co-op form of programming.

In addition to the eighteen hole college owned course - a good test of golf - there is an attractive well-equipped pro shop where students have the opportunity for work assignments. Also, indoor facilities for practice, teaching and golf club repair are being developed, and there is a Class "A" P.G.A. Professional on the staff. These latter conditions were specifically required by the P.G.A. With all of these advantages at the school, however, the golf professional of tomorrow still requires the insight from the working professional. Therefore, of the four and one-half years in the program, P.G.M. students spend two years on internships in four different six-month periods.

These young men and women scatter to all parts of the country during two different periods of the year, September through February or March through August. Students have been placed in twenty-seven different states, plus Puerto Rico.

Internships duties vary from job to job, but may include grounds maintenance, starting, ranging, golf car attendant, helping with tournaments, pro shop attendant, merchandising, working with the junior programs, and teaching.

They might even get some help with their own games since students are strongly encouraged to work on their golf while on the job.

The first class was admitted in the Fall of 1975 and are presently seniors. The first graduates will finish August of 1979, In fact, a number of students, who were admitted with transfer credit, finished the academic portion of their programs in August of 1978 and left campus to finish their last two internships, never to return.

It is anticipated that new graduates will be hired as assistant professionals, in not too different capacities than during their internships. However, with a college degree, especially in marketing, we fell they will have a number of options and if their career does not advance , they can easily go in another direction.

Actually, the job market in golf is tight and highly competitive, and it appears that it will continue this way for some time. The Professional Golfer's Association has 8,000 members, presumably holding

adequate jobs, and there are also 4,500 apprentices, probably assistant professionals, who will be seeking head jobs in the near future. There are about 12,000 golf facilities in the country that could reasonably support a P.G.A. professional, and this number is only growing by two to three percent a year. And, of course, one does not have to be a member of the P.G.A. to hold a job in golf, and many non-members are competing for available positions.

It is the judgement of people in the field, however, that the prospects are good for someone with golf talent and a background in business, and we feel that graduates from the Ferris program will have a decided advantage. The Association is also looking for us to open up other areas of employment in golf not now being served by the P.G.A. professional.

The Professional Golf Management Program at Ferris State is a unique program, This program could serve as a model for similar endeavors in other sport areas.

12. Sports Communications

Charlotte Lambert
Oregon State University

Sports Communication. How feasible is this as an alternative career option for majors in Physical Education? Sports and athletics have a tremendous place in American life. Communications, on the other hand, seem to be what is holding the world together lately. Put the two together, with expertise in sports and in communication, and the number of jobs available to intelligent, talented majors should be infinite. And with job markets and societal needs changing so rapidly, who knows what jobs those well-educated majors will be filling later in life? They will have been equipped with some important skills, knowledges and "developed" talents. They will make their way in the world.

Sports Communications majors in our department at Oregon State University have gone in four different directions. We had prepared a curriculum for a 5th and 6th, but we have had no one requesting the latter two as yet. Because Sports Communication covers such divergent fields and combinations of interests and talents, it is difficult to prepare a set of curriculum and insist that everyone in this option must take "the following set of courses". Therefore, we have kept Sports Communications in the option called "Applied Physical Education." Majors must take the core of Physical Education courses, and then they choose from among the listed courses in the prepared programs the ones which best suit their anticipated needs.

The four areas of Sports Communications in which we have majors are Sports Broadcasting, Sports Writing, Sports Photography, and Sports Information. The other two areas anticipated were Sports Artist and Funding Officer. We have graduated students who obtained jobs in Sports Broadcasting, Sports Writing, and as Sports Information Director.

To be successful in any application of Physical Education knowledges, the students have to have talents beyond what we have taught them. This has always been true. Even when we were preparing only Physical Education teachers, the successful majors were the ones who came to us with a great deal of motor skill and the ability to teach. We developed those two talents - physical skill and teaching ability. In the Sports Communication option they also come with talents to be developed - either they speak very well, or write well or they have artistic abilities to direct into photography, painting, or sculpting. Or they have a business sense or organizational ability. Because of these various talents, their career goals and interests go in many directions. The one common element they have, or they would not be wanting to major in Physical Education, is a love of sports. Quite

often this love is a spectator, not the participant which we usually get. They want to be involved in sport, but probably from previous experience have decided that they are not personally that talented in sports. And for the ones this author has met so far, none of them wants to be a teacher of anything or a coach.

To be a Sports Broadcaster, the student must have a talent for speaking. We can and do furnish depth of knowledge concerning various sports, the rules, officiating, team tactics, plays, strategy, analysis of skill and errors, history of the sport and a chance to verbalize sport action as it occurs. We do not teach speech. The Speech Department on campus provides the minor, or double major if the student desires it. But in general these students already have an above average vocabulary, good grammar, pronunciation, inflection, and a great deal of public speaking experience. Some have already worked in radio or on televison. One had even had sports broadcasting experience on radio. A microphone does not seem to intimidate these students in the least. Some know one sport well, but need greater breadth and depth of sport knowledge if they are to be hired during enough sport seasons to be able to make a living.

We expand their breadth and depth of sport knowledge, but we do nt expand it as far as we should. Our program covers the usual sports included in physical education programs rather than all the prime spectator sports. We do not include, for instance, horse racing, auto racing, demolitian derbies, boxing, roller derbies, figure skating, ice hockey, rodeo, ski jumping, or slalom, surfing, weight lifting, sailboat racing, or crew. We do include football, basketball, baseball, soccer, gymnastics, tennis, golf, bowling, wrestling, track & field, and aquatics. So we offer eleven sports, through Professional Activity or Coaching courses, and recommend that the person become an expert in at least three. That leaves 14 or 15 spectator sports for the rest of the world to broadcast!

Sports Writing is similar. Students have writing talent before they come. More students seem interested in sports journalism, writing for newspapers, than they do in writing for magazines or producing novels or textbooks. Perhaps this is because they know that there are far more newspapers, and therefore more jobs, than there are sport magazines. And writing and selling your own novels or textbooks is a precarious way of making a living, at best. Those activities are perhpas adjunct to their chief occupation.

How many jobs are there for sports broadcasters and sports writers? It is very difficult to find the answer to that for any one year; but one way to determine the potential for employment is to find out how many radio and television stations there are in the United States, how many newspapers and how many magazines which are either devoted to sports or regularly carry sport articles. To investigate this writer went to the library and looked up

the figures in the Statistical Abstract of the United States for 1976 and was amazed. There are over 8,000 radio stations. There are over 1,000 television stations. There are almost 2,000 daily newspapers. And there are 636 sport magazines or magazines with sports articles. That totals over 11,600 jobs if each hired only one. It is a wonder how they have managed to survive so well up to now without our well-educated Sports Communications majors to hire! Table I indicates the professional job market in Sports Communication, both for the nation and by state.

TABLE I. JOB MARKET IN SPORTS COMMUNICATION

(Data from Statistical Abstract of the U.S. - - 1976 - - U.S. Dept. of Commerce pp. 535-6)

	1970	1975	
Commercial AM Radio:	4,370 stations	4,488 stations	
Commercial FM Radio:	2,260 "	2,847 "	
Educational FM Radio:	462 "	850 "	
Commercial TV :	823 "	759 "	
Educational TV :	212 "	256 "	
Sports Magazines :		85	
Other magazines w/ sports articles :		551	11,602 job opportunities in Sports Communications if each hired only one.
Daily Newspapers :		1,766	

STATE	TOTAL	RADIO AM	RADIO FM	COMMERCIAL TV	DAILY NEWSPAPERS
Alabama	246	139	66	17	24
Alaska	35	17	4	7	7
Arizona	109	60	24	11	14
Arkansas	170	82	46	8	34
California	574	228	170	54	122
Colorado	140	67	35	11	27
Connecticut	91	38	20	5	28
Delaware	20	10	7	--	3
D.C.	25	9	8	6	2
Florida	376	199	97	29	51
Georgia	304	173	77	17	37
Hawaii	44	25	5	10	4
Idaho	79	43	11	9	16
Illinois	355	124	121	22	88
Indiana	270	85	88	17	80
Iowa	188	74	59	13	42
Kansas	158	59	35	12	52
Kentucky	234	111	84	12	27
Louisiana	188	93	52	17	26

STATE	TOTAL	RADIO AM	RADIO FM	COMMERCIAL TV	DAILY NEWSPAPERS
Maine	72	36	20	7	9
Maryland	102	49	33	7	13
Massachusetts	163	65	41	11	46
Michigan	299	126	98	21	54
Minnesota	188	90	55	12	31
Mississippi	191	103	55	10	23
Missouri	250	109	61	23	57
Montana	80	41	16	12	11
Nebraska	109	50	24	16	19
Nevada	43	19	9	6	9
New Hampshire	53	27	14	3	9
New Jersey	100	37	29	5	29
New Mexico	109	57	24	8	20
New York	378	161	111	29	77
North Carolina	356	205	81	18	52
North Dakota	56	26	8	12	10
Ohio	362	122	118	27	95
Oklahoma	173	67	44	9	53
Oregon	143	79	30	12	22
Pennsylvania	422	174	120	23	105
Rhode Island	32	15	8	2	7
South Carolina	185	105	49	12	19
South Dakota	69	31	15	10	13
Tennessee	273	153	69	17	34
Texas	603	287	146	56	114
Utah	56	33	15	3	5
Vermont	37	18	9	2	8
Virginia	237	133	66	15	33
Washington	173	94	42	15	22
West Virginia	128	61	29	9	29
Wisconsin	236	98	86	17	35
Wyoming	46	29	5	3	9
Puerto Rico	85	48	30	7	--
Guam	3	1	1	1	--
Virgin Islands	8	3	3	2	--

Sport photographers usually seek jobs in those same areas of employment. Any sporting event broadcast on television had, of course, to be televised, photographed, often from 4 or 5 directions at once. The composition of a good "still" picture is often difficult. To photograph live action, to anticipate what is going to happen and where, and to have a camera on it, takes a great deal of knowledge of the sport. So the cameramen themselves must be sport experts to be at the right place at the right time, plus a great deal of physical skills in some sports, like football, where they must have speed and agility while carrying a heavy weight on their shoulders as they race up and down the sidelines.

Meanwhile up in the booth or back in the studio, there should be someone who is both a master sports specialist and an artist as he produces the picture we see at home by switching from one to another of the four or five live action films simultaneously flashing on the screens before him. That person determines what we see. He, too, must be a master of sports. He can only show to us what his cameramen photograph, but he must mix and match the pictures instantly, with great skill and knowledge. Action which has been pre-recorded gives some time for creating a good sequence. Live action does not. We see their mistakes and their successes.

Newspapers and magazines also carry sport pictures, but their editors have time to choose from dozens of photographs the ones they will print. Quite often, for newspapers, an action shot is an action shot, as long as players are correctly identified in the picture.

Behind the scene of big teams or sporting events is another communication expert, the Sports Information Director. He works with newspapers, magazines, radio, television, the general pubiic to make this athletic department, pro team, championship race, bout, or whatever, a success through public relations, disseminating the right information at the right time to the right people so that the whole thing will be a financial success in the long run. Many colleges and university athletic departments have Sports Information Directors, and most recently, women's athletic programs have also found it essential to hire one. So jobs are there. The person needs to know and love sports, be able to understand, appreciate and communicate with coaches and players as well as the athletic director, know the people of the press, radio and television community, be an expert in public relations, and sometimes be a fund raiser.

Often colleges and universities have a separate athletic funding officer who is responsible for contacting alumni, businesses, etc. for financial support for teams. The job is particularly difficult if a school has been losing more than winning for the last few years, especially in football, as ours has. Colleges all over the nation are having a terrible time lately in financing athletics, since Title IX makes it manditory that there be no sex difference in opportunity or support and costs are soaring. So an athletic funding officer as well as a Sports Information Director has become essential. This too is a Sports Communication job, with a dedication to sports matched by business and public relations knowledge, and a gift for persuasion.

So what is the bottom line? What curriculum is essential for preparing these people? Most colleges and universities have the "communications" courses already available in other departments - speech, journalism, composition, photography, broadcasting, business, public relations. That helps. Use them. Faculty in those other departments are experts in their own fields - we are not. The trick is to combine those knowledges with parts of our own field - sports. It requires transfer of learning. And we all know from research and from our own experience that transfer occurs in two ways: by insight among the very bright, or when deliberately taught. Not

trusting that all of our majors will be "among the very bright," we need deliberately to teach and give opportunity to practice and guide the learning process of these Sports Communicators. It could most readily be done as a part of sport courses we already have for majors. Why must all of the students in a major basketball course turn in lesson plans for teaching it when they never intend to be a teacher? A change in assignment for them to verbalize play-by-play action, or to write up a history of the change in uniforms over the years, or trace down the statistics of record performance in various aspects of the sport, or to photograph live action, or a dozen other assignments could replace lesson plans. We teach our students that they must individualize instruction according to needs, but we still require the same assignments of everyone in class.

The trouble with that is that it is easy to say and has all of the logic in the world, but it is not easy to convince the teacher of that class to change his way of teaching that class, to allow for diversity of interest and career goal. Academic freedom to "teach the class the way you want to" rears its head and the administrator is left sitting there with a bagfull of logic and a program full of teaching methods courses. Well, so there is another job for a good sports communicator. This writer would hire one to teach some of our courses if one could be found with a doctor's degree.

So if you cannot persuade your faculty to change the way they teach the sports methods courses (we call them Professional Activity courses), your department may have to offer a separate Sports Communication course in which students see films or video tapes of games or sporting events and on the spot, "Broadcast" them, each into his own tape recorder for self and teacher analysis. Other students in class could make notes and write up their own sport column reviewing the highlights of the game, if they are wanting a career in sports journalism. Interviewing coaches and athletes at your own college is also good practice, and sometimes leads to an article in your school newspaper. If you get it published you get an A for today! Nothing wrong with that. Many institutions now have switched to accepting published research articles in a refereed journal in lieu of a doctoral dissertation, so why not "an A for Today" in a course? Meanwhile the sports photographers in class are analyzing the film for composition-long shots, close-ups, zooms, wide-angle, panning, shots of action, away from action, missed the action, etc. And writing a critique of the film: what was done well; what should have been done differently to make a better film for the viewers? It could be an exciting class to teach, and should certainly be popular enough to support itself with student credit hours. And it would be a godsend for neophyte Sport Communicators.

What kinds of salaries can these majors look forward to if and when they get a Sports Communications job? How does it compare with teaching? Again, the latest figures found were from the 1976 Statistical Abstract of the United States, which was reporting 1974 figures. So allowing an average of

6% of a year salary increase for each of the last four years, 1978 figures should be close to the following for starting salaries (Table 2):

Teachers - $9570 or $266 per week for 36 weeks.

Sports Broadcasters - $11,600 for television. Radio a little less. This averages about $223 a week for 52 weeks, but they do get additional for overtime. They are under union contract. Broadcasters with five years of experience average $18,700 and of course well known announcers make a lot more.

Sports Photographers - For newspapers they make about the same as television broadcasters. They start at an average of $11,300. With 5 years experience they average $17,100, though many are making in excess of $27,500.

Sports Writers - Starting salary $10,850, or about $209 a week for 52 weeks. Those with five years of experience average $17,700. Well known ones can get paid per article.

TABLE 2. SPORTS COMMUNICATIONS SALARIES
Projected for 1978

Occupation	Starting Annual	Starting Weekly	5 Yrs. Exper. Annual	5 Yrs. Exper. Weekly
P.S. Teaching:	$ 9,570	$ 266. (36 wks)	$ 12,440	$ 345. (36wks)
Sports Broadcasting--				
TV:	11,600 + overtime	223. (52 wks)	18,700 + overtime	360. (52wks)
Radio:	a little less than TV			
Photojournalism:	11,300	217. (52wks)	17,100	330. (52wks)
Sports Writers:	10,850	209. (52wks)	17,700	340. (52wks)

	Total Positions in 1974	Average Salary
Full-time Teachers:	Over 2.7 million	
Kindergarten & Elementary:	1.3 million (85% women)	$ 11,234
Secondary:	1 + million (56% women)	11,826
Colleges & Universities	622,000 (25% women)	16,704
Full-time Staff Announcers	Over 19,000	
Radio:	15,200 + Free Lance Announcers Individual Assignments	not given
TV:	3,800 + Free Lance Announcers Individual Assignments	$ 160-350/week
Photojournalists	not given	$ 100-450/week
Newspaper Reporters	not given	$ 175-425/week

Above figuers include all positions and salaries within the occupation, not just for sports or physical education.

For Further information, Write:

A. Concerning Newspaper Reporting

American Newspaper Publishers Association Foundation
P.O. Box 17407
Dulles International Airport
Washington, DC 20041

B. Concerning Broadcasting

National Association of Broadcasters
1771 N Street, NW
Washington, DC 20036

C. Photography

Photographic Art and Science Foundation
1100 Executive Way
Des Plaines, IL 60018

With that sort of job and salary potential, what does it matter that some journalists tell you that they prefer to hire journalism majors than a physical education major with a journalism minor? Or if some station manager says he prefers to hire speech majors rather than a physical education major with a speech minor? If our graduates really know their chosen sports very well indeed, and have the verbal or artistic ability as well, they will make their own way. They will get a job and prove themselves.

SECTION IV.
CONCOMITANT PROGRAM COMPONENTS AND PROCESSES

13. Advising, Selection and Retention of Majors

Stephen E. Klesius
University of South Florida

Professional preparation programs in physical education have a right and a responsibility to advise prospective enrollees, select students and to dismiss teacher candidates. The applicant should be granted due process and enjoy an equal opportunity within an affirmative action atmosphere for decision-making concerning entry into a professional program. The responsibility continues in that a student should not invest substantial time, money and/or effort only to fail to develop knowledges, skills, and attitudes needed to become a physical educator. Likewise, a responsibility extends to society for a professional program to graduate and subsequently have licensed only individuals who are able to successfully meet the requirements for being a capable teacher.

Selective admissions and retention may be used to control entry and continuation in a professional preparation program for several reasons. These reasons are to:

1. insure that only persons who have potential for succeeding in becoming a physical education teacher will be admitted to a training program.

2. enroll only the number of students that the human, financial and physical resources of the program can accommodate so that quality professional experiences can be provided.

3. limit the supply of individuals entering the professional field, especially in times when an over-supply of physical education teachers appears to exist.

Advising, selection and retention procedures are no longer a luxury and/or courtesy. Today, they are becoming a necessity and an obligation.

Problems exist and safeguards must be exercised regarding selection and retention of students. Robert Draba and Lesley Steinkellner, in relation to the identification of selection criteria and procedure, stated "There seems to be general agreement that more criteria and better procedures should be available to those making screening decisions but the difficult questions remain: which criteria are relevant to effective teaching, and which procedures are appropriate for measuring the relevant criteria?" [1] John MacDiarmid raised a concern when he stated "Needless to say, selecting people for anything is a difficult and uncomfortable task. All we can claim is that we do

our best in a situation where the measures for comparison have a level of validity that is uncomfortable."[2] These are some of the problems or challenges which we face. However, the task is not overwhelming. Numerous programs have initiated advising, selection, and retention procedures. This paper will highlight some of these approaches and outline guidelines for advising, selecting and retaining students in professional preparation programs in physical education.

The first guideline is that the model for selection and retention must be flexible in relation to institutions and individuals. Different program settings and different kinds of learners require flexibility in selection practices.[3]

In this regard, two different institutional settings must be acknowledged. These are the four-year type professional preparation program where students have time to become known by the physical education faculty and the two-year, upper-division type professional preparation program where students must be screened before being allowed to enroll in program course. Both types of programs have their own problems, however, there are many commonalities and basic needs.

ADVISING

Pre-admissions program information and advising must be a common feature of any selective admissions procedure. If possible, this phase of the selective admissions procedure should be accomplished before the individual comes on campus as a full-time student. Information to prospective students about the selective admissions policy, procedures for application and application deadlines may be communicated in a number of different ways. One of these ways is by means of the University Catalog or Bulletin. Pertinent information such as a description of the program, course requirements and descriptions, and selective admissions procedures and deadlines can be presented in this official University publication. Assuming that the Catalog is one information source that almost every prospective student would consult, it is a must that complete information is presented in a clear, authoritative, and meaningful manner.

In the spirit of affirmative action procedures, other measures must be taken. Examples of these measures are as follows:

1. Contacting all in-state junior college and university level student services and advising bureaus in order to explain the necessity of completing appropriate procedures for the program's selective admissions procedure.

2. Carefully explaining the selective admissions procedure to currently enrolled majors so they can provide correct and suitable information to prospective students who contact them.

3. Informing the on-campus Admissions Office and student services and advising bureau that selective admissions procedures have been initiated. The prospective majors must be informed of the selective admissions procedure either by that office or the prospective student's name, address and date of contact with the university must be promptly forwarded to the physical education program so correspondence can be initiated.

4. A program guide should be prepared which presents a detailed statement of the goals or purposes of the program, description and sequence of courses, program expectations and requirements, employment outlook in the field, selective admissions procedures, and an application form.

The preceding steps are especially important for two-year program or transfer students. In a four-year program design, an introduction to education or physical education course can be utilized for communicating information relative to a major and career in physical education.

In such a course, a textbook such as Concepts and Careers in Physical Education by Robert Clayton and Joyce Clayton[4] would be appropriate. The purposes of this book include (1) describing the purposes of physical education, the knowledge bases of the discipline and the available career possibilities and responsibilities of the physical educator and (2) presenting means by which the reader's qualifications for the profession can be identified, examined and compared to the skills and attributes needed by successful professionals. If these purposes are accomplished the reader with or without a counselor/instructor could make the correct decision as to whether he or she should (and could) continue the training necessary to become a successful physical educator."[5]

If the student wishes to submit an application after being introduced to and made aware of the program goals and expectations and the career opportunities, he/she is indicating commitment and sense of purpose relative to entering study to become a physical educator. In the University of South Florida program, when an applicant is informed that the program offers study in physical education with field experiences and internships at both the elementary and secondary levels and only one elective course in athletic coaching, the student must ask him/herself whether the program will meet their personal/professional goals. This process of self-examination of

interest and/or aspirations is an important element in a selective admissions procedure.

The second guideline is that prospective students must be informed concerning the selective admission procedure including deadlines, and the purpose and requirements of the professional preparation program.

SELECTIVE ADMISSIONS PROCEDURE

Typically, the criteria used for the selection of teacher education candidates is scholarship or grade point average: English proficiency; references or interviews to assess "desire to teach;" speech proficiency; physical and mental health status; satisfactory character, personal integrity or personality and experience in working with children. (6, 7, 8, 9). Some of these criteria are University/College admission requirements and others are specific program entry requirements. These represent some of the possible criteria a professional program faculty can draw from in order to develop a selective admissions procedure. One consideration in making decisions about a criteria is whether the selective admission procedures are to be developed for four-year or two-year type professional education programs.

Examples of selective admissions procedures for the 4-year type program, where students usually begin taking professional course work in physical education as freshmen, will be presented first. The procedures used by The Ohio State University and Indiana University will be identified to illustrate features of selective admissions practices which are working successfully.

Indiana University's (10, 11) selective admissions procedure starts early in the student's educational career, allows the student to be accepted as a teacher candidate at the beginning of the Junior year, and ends when the individual is recommended for teacher certification at the end of the program of study.

The procedure is viewed as a continuous and ongoing evaluation scheme to provide guidance for self-analysis and program counseling. The specific elements of the selective admissions procedure are as follows:

1. Student Evaluation Form - four favorable forms must be secured from different faculty members for courses completed during freshman and sophomore years.

2. Grade Point Average (GPA) of 2.0 overall and 2.0 in major courses.

These two criterion measures are checked at the end of the sophomore year. If the selective admissions recommendation is positive the student is admitted to teacher education - student teaching status at the

beginning of the junior year. Ineligible students may take further basic course work to increase the G.P.A. or number of favorable evaluation cards. In addition, the individual may meet with the evaluation committee to be granted a special admittance.

In order to be rated favorable for teacher certification, the student must have satisfactorialy met the two previously stated standards and secured positive evaluations from 80% of the faculty whom the person has had as an instructor. Because the process involves self-analysis and is continuous in nature with periodic written status reports to the applicants only a very small percent of the total number of students are screened out by the faculty.

The Ohio State University[12] procedure is used to fill a quota of 90 students each year into the major program. An applicant must have completed 45 quarter hours and have a G.P.A. of 2.25. A student may be admitted during either the Fall or Spring quarter. The five criteria of the procedure are as follows:

1. Three written recommendations from former employers or teachers
2. Grade Point Average
3. Demonstrated skill in selected physical activities
4. Three faculty evaluations
5. Satisfactory faculty interview

Skill in physical activities is demonstrated by means of skill assessment cards completed in lower level courses, evaluation by a college varsity coach, evaluation by a scholastic varsity coach, or periodically scheduled skill evaluation day sessions. The interview with the selection committee lasts for thirty minutes. The applicant is rated from 1-15 and a total of 10 points is considered an acceptable interview score. The areas rated include personal traits, professional goals, prior achievement and experience in physical education, and other comments.

Programs where prospective students are not in the physical education program or even on campus before they are admitted require a different design for the selective admissions procedure. Two examples of this type design are the School of Physical Education, The University of Manitoba and The Professional Physical Education Department, University of South Florida.

The University of Manitoba selective admissions procedure[2] requires

prospective students to complete an application, read a general information form, secure three letters of reference, attend an orientation-interview session and provide an academic transcript. Each applicant's file is evaluated by the selection committee as follows:

1. reference letters - 10%
2. leadership skills - 15%
3. activity skills - 15%
4. academic perofrmance - 60%

The Selection Committee and the University Admission personnel hold meetings during June and July to determine the successful applicants. Appeals, if any, are first conducted on the level of the school and if not resolved at that level, a University-wide appeal procedure is followed.

The interview-orientation sessions are scheduled for two-hour periods during the day or evening in March, April and May of each year. Applicants are excused from attending one of these sessions if a financial or personal hardship is shown.

Deadlines for letters of reference for early admissions applicants and transcripts for all applicants are announced and enforced. In addition, a program description brochure states that "students seeking admission are required to attend an orientation program and/or interview. Candidates are required to give evidence of professional suitability."(13)

The University of South Florida offers an upper division two-year physical education program. A selective admissions procedure [14,15] was initiated in May 1971 to insure the high quality of program graduates in view of steadily increasing student registrations and the steady-state status of faculty resources and school field experience-internship sites. The original selection procedure consisted of an on-campus orientation and interview session. However, in June 1973 a study was completed to determine the reliability of the interview ratings, the validity and predictive ability of the interview ratings and whether an alternative selective admissions procedure having greater prediction power than the interview alone could be developed. As a result of this study, the program's current selective admission procedure was developed.

An admissions quota of 70 students for the Junior Year class was originally established. This number was set in relation to available faculty resources and internship sites. Presently, in response to increased Teecher Education Center assignments, off-campus non-credit inservice activities, 55 new students will be admitted in September 1978.

Prospective students must apply to the program by the first of April to be admitted to the program in September (Quarter I). In-state applicants complete an on-campus visit consisting of administration of two standardized tests (Tennessee Self-Concept Scale and Self-Descriptive Inventory); presentation of an overview of the program philosophy and course requirements and expectations by means of a video-tape; travel to a school where the current Junior-level physical education majors are engaged in a continuous type internship program teaching elementary school children participate in a small group discussion; and complete a personal interview conducted by two faculty members. The interview lasts approximately 45 minutes. The faculty members independently and later compositely rate each applicant in the areas of verbal communications, sociability, personal concern for physical activity and health, self-esteem, sensitivity and empathy, and expression of motivation for choosing physical education as a career.

A selective admission score is computed using weights generated by means of a multiple regression analysis. The scores for 2 sub-tests of the Tennessee Self-Concept Scale, a total score for six sub-scales of the Self-Descriptive Inventory, Grade Point Average, and a composite rating interview score are used as input data.

The orientation, data collection and interview sessions are conducted for groups of up to twenty students as needed on each Monday from late April to early June each year. All ten departmental faculty members are involved in the selective admissions process. The lowest number of applicants processed in a single year was 79 and the greatest number was 150. Thus, acceptance notices are sometimes sent to less than 50% of the applicants. The only appeal is a recheck of mathematical computations. Students not admitted for one year may reapply in the future.

Students residing outside of Florida during April to June complete the two standardized tests, submit transcripts, and submit letters of recommendation in replacement of the interview. Only ten percent of the total number of students are allocated to out-of-state student admissions.

From the examples cited, several selective admissions guidelines can be drawn. These guidelines are as follows:

Self-selection should be encouraged by providing information and experiences which allow the candidates to judge their suitability for becoming a physical education teacher and the suitability of the program for meeting their perceived professional career aspirations.

Whenever possible, selective admissions interviews should be supplemented by other means of information/data collection in determining admissions status. Grade point average, standardized tests, letters of reference, personal physical activity/experience inventories are some of the

means available for data collection.

The selective admissions procedure should function to identify students who have the greatest chance to succeed in the physical education program and the skills and characteristics the program does not have the means to develop or remediate.

Selective admissions procedures should be consistently administered. No exceptions should be made that are not in accordance to policies which are made known to all applicants.

For program efficiency, the selective admissions procedure will usually be used to fill an enrollment quota. By limiting enrollment of students, the program can operate with an optimum number of students in order to assure quality professional preparation experiences.

RETENTION

Having selective admissions does not mean that the program does not need to have a student retention procedure. In the cases of the four-year type program, the selective admissions procedure is generally a retention rather than a true admissions procedure. Failing students who consistently do not perform at satisfactory levels of academic achievement is one way to remove students from a program. In addition, Grade Point Averages are used to prevent low academically achieving students from entering an internship or graduating.

In many universities, procedures exist to dismiss or disbar a student from the program even though the student is making satisfactory academic progress. The grounds usually are a consistent pattern of unprofessional, unethical, or improper conduct as a student.

At the University of South Florida the Counseling and Retention Policy[16] is viewed as a positive student-centered process. The first step is for the course professor to deal with a student having a problem as a course matter. Occasionally, faculty meetings are held to identify students having problems in more than one course. When such a student is identified, the professors of the courses in which the student is enrolled meet as a faculty sub-committee with the student. After listening to and counseling the student, the sub-committee with the student usually develops a contract for progress to be made by a specific date. This contract is cancelled if the student makes the required progress. If the student does not make the specified progress, the sub-committee schedules another meeting with the student. At the end of this meeting the sub-committee can recommend that the student be retained in the program or removed from the program. If the recommendation is removal, a faculty meeting is called. The sub-committee presents the facts of the case and then makes the recommendation for removal. The faculty

then votes to accept or reject the recommendation of the faculty sub-committee.

If the recommendation for removal is accepted, the student is informed that he/she has been dismissed from the program and that a University-level grievance procedure is available. Usually, the case is resolved with the student making the necessary progress to continue in the program or the student voluntarily leaves the program. In all three cases in which the students who were dismissed from the program initiated the University-level grievance procedure, the Department's action was upheld.

The guideline concerning student retention is that careful and deliberate steps must be followed which serve the purposes of identifying the problem(s) the student has, helping the student to develop a plan to resolve these difficulties, and, if necessary, to protect the standards of the program by dismissing the student from the program and not allowing subsequent enrollment in any program courses.

CONCLUSION

Advising, selection, and retention procedures require a careful and deliberate plan of action. Professional programs must take the initiative to help prospective students make career and professional preparation program choices. Furthermore, a standard of excellence must be upheld which will enhance the reputation of our profession and the quality of programs of physical education for children and youth.

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14. Selection of Criteria for Non-Teaching Programs in Physical Education

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As we forge into the decades of the eighties and nineties with our new mission of providing leadership for diversified programs in physical education, it behooves us as a profession to consider means for quality control for our emerging multi-directional programs. Our literature, seminars, conferences and issues classes of the past are replete with debate about professional image. We have sought through all manner of means to gain respect from fellow educators and professionals. As we now in earnest begin the process of taking physical activity programs to the people not only through education but through private enterprise and municipal/state/national government programs the potential influence we have to benefit our fellow humans has multiplied enormously. The value of such programs such as the prototypes presented in this document, is directly related to the quality of personnel selected for leadership in these programs. It is, therefore, essential that thoughtful attention be given to the business of crite ria against which our new physical education advocates may be judged. Such an opportunity - - to control quality at the outset - - seems all too seldom an alternative. The task will be difficult but controls should be an implicit part of our new ventures.

The problem of identifying criteria for personnel selection is essentially the problem of determining what critical variables are associated with those individuals who function successfully in given occupations. As Guion puts it, " a criterion is behavior or consequences of behavior, that one wishes to predict." (Guion, 1961, p. 141-149). If somehow, it were possible to identify those abilities and qualities which undeniably meant success in a given occupation while absence of the said abilities or qualities meant failure, we would indeed have valid selection criteria. The likelihood that such discrete variables can be identified in light of past efforts at predicting teaching competence seems minute. However, the fact remains that some specific requirements must exist if we are to assume some specific program of preparation is essential for occupational entry. It, therefore, becomes our task to research the subject attempting to determine as precisely as possible the most essential ingredients.

In reviewing some of the basic work in the literature of criterion research, there appear to be a few common principles that should be applied to our efforts. These were summarized in an article by Freeberg in the Journal of Applied Psychology. (Freeberg, 1976) in his effort to identify criterion measures for youth-work training programs. Essentially Freeberg describes three important ground rules for criterion research. These rulescall for the need to (1) use multiple behavioral indexes (as

opposed to one or very few measures assumed to be most critical) in the early stages of criterion development; (2) specify the location of criteria along a time continuum so that any measure is identified as proximal (immediate), distal (intermediate), or final (ultimate); and (3) determine the relevance of a criterion measure.

The first of these rules, that efforts at criterion development use multiple behavioral indexes, seems fundamental. The examination of any position beyond the basic assembly line job reveals that within that position there are performance dimensions which are independent of other aspects of performance of that same job. For example, it appears that satisfaction with one's job and performance of that job may be two separate classes of criteria. It may be altogether possible that an individual's satisfaction may be high while performance may be low or vice versa. Lumping satisfaction and performance together in attempting to establish a single criterion would neutralize the independent predictability of either. Job performance may include physical, sensory, perceptual, intellectual, academic skill or other requirements. These are not measurable by a single criterion. The job may also have social, interest and/or emotional requirements which again seem more closely related to satisfaction. In order to assess the total functioning of a human in the complex world of work, it is improbable that a single or even several criteria can be selected. If however, criterion elements are found to be related, a composite measure may be used. If they are independent, predictors must be compared independently.

The second of Freeberg's ground rules suggests that criteria be designated along a time continuum. Ultimate criteria are those final expectations beyond which further standards for judgement of personnel are non-existent. Necessarily, ultimate criteria are complex and multi - dimensional. Because utlimate criteria are remote and broad they are generally difficult to quantify and thus less susceptible to evaluation. Nonetheless, ultimate criteria are the final goals of our programs and efforts to select personnel able to achieve these goals are essential. Intermediate criteria are partial measures of the degree of success of the preparation program, usually taken in the later stages of program completion . Grades throughout the final year of a non-teaching program would be an intermediate criteria. Practical ratings by supervisors would be another. As intermediate criteria, however, they are always partial in that they can only give an estimation of the goal toward which our program is directed. Moreover, immediate criteria may in reality be required because only short term measures are available. Immediate criteria may be the bases on which judgements for training program selection are made.

The third rule, that criterion measures must be relevant, is to say, in the words of Thorndike that "knowledges, skills, and basic aptitudes for success are the same as those required for performance of the ultimate task. That is, the systematic, non-error sources of variance in score on

the criterion measure should arise from the same factors that make for ultimate success on the job, combined with the same weights." (Thorndike, 1949, p. 125-127). Rational, thoughtful analysis is essential in the selection of criterion measures. A thorough knowledge of the position to be assumed by the person being selected is essential to the process of determining relevancy of criterion measures.

In addition to these ground rules, the development of criteria for evaluating non-teaching programs in physical education is confounded by some further special problems that need at least to be aired. Three kinds of problems increase the difficulty of our task of criterion development.

First, non-teaching programs in physical education are on the cutting edge and are largely untested in the employment world. That is to say, since there is not always a core of people actively functioning in a given foreseeable future physical education vocation, there is no reference group to examine for purposes of determining relevance of our criteria. The ultimate tasks are only surmised and at present (for some non-teaching options) extensions of our anticipations. Without reference groups, our criteria become short or intermediate term, except in theory.

A second problem we face is the result of lack of absolute definition of some of the non-teaching vocations. Whereas a particular program, for example, sports communications, may have a common core of courses of study for sportscasters, sports writers and sports information directors, the actual jobs of these persons (in fact the variations within each of these categories)may be so different that common criteria can not be applied. To attempt to arrive at a common set of criteria for this non-teaching program would violate the basic ground rules of relevancy.

The third problem is related to the notion that we are attempting to provide a variety of alternatives to persons interested in physical education/ sport positions of work. Each of the non-teaching programs we develop may well require unique skills, abilities, and knowledges from every other option. Each, therefore, could be expected to require unique selection procedures based upon the analysis of the ultimate expected job performance requirements. Whereas some criteria may well be applicable to all or most programs, some indeed may be relevant to only a single option. We could be talking about as many sets of criteria as there are program options.

Despite the difficulty and enormity of the task, however, there do appear to be some steps to be taken to begin the process of criterion selection. The first, it would appear, would be to do a complete, rational, job analysis of each of the non-teaching options to be considered. What is the nature of the behavior called for by the employment situation? The analysis should attempt to determine both conceptual requirements of the job and the manifestation of these concepts in performance terms. That is, an effort should be made to distinguish between what the cognitive abilities for job performance might be and the skills required for translating these concepts into work

segments. For example, a community exercise specialist would need basic understanding of principles of exercise physiology. However, that person's employment situation may require the design of exercise programs for many special populations served by the program. Ability to respond to a concept examination, such as within the domain of exercise physiology, may be completely independent of ability to analyze a medical report stipulating exercise limitations for a given individual who has enrolled in a group adult fitness class.

A job analysis might include examination of questions like these:

1. What knowledges are required for this job?

2. What information is needed by the person performing in this position?

3. What comprehensions or understandings of internal relationships within the field or intrafield relationships are required?

4. What attitudes are desirable? toward the field? toward the agency? the career? people? one's self?

5. What perceptual skills are needed?

6. What motor and psychomotor skills are required?

7. What social skills are essential?

8. What analyzing skills, synthesizing skills, evaluating skills, problem skills . . . are required?

The job analysis will provide post program or ultimate criterion information. From this analysis, the process of selecting appropriate measures to reflect critical criteria is initiated. Measures are likely to either evaluate performance on a specific task or to attempt to evaluate in a more general way a comprehensive construct associated with job performance. In either instance the judgements made are on a continuum from objectivity to subjectivity.

Some examples of criterion measures that may be considered are:

1. Examinations of knowledge and understanding. These are probably one of the most common forms of criteria, and although they are one of the more reliable, more practical, more convenient measures, the fact that knowledge about the job compared with performance on the job seems to be altogether different causes this criterion to be suspect.

2. Objective job performance measures. In some personnel selection, these measures are so specific that they serve as an ideal criterion. Typing speed corrected for errors is an ideal performance measure for selecting typists. However, the availability of such measures may be limited to programs more closely associated with production per se than human service vocations. The capacity to achieve maximum utilization of a racquetball center may be an

indication of job performance, especially if the center is a private business and court utilization relates directly to profit. The effectiveness of a sports information director's impact in generating support for an emerging sport program may be less subject to objective job performance measures. However, if and when it is possible to use this criterion the direct relevancy tends to increase the value of the measure.

3. Observations of job performance. Well defined segments of job performance observed by trained evaluators provide information about performances which do not leave any record per se. Such approaches might be used when attempting to determine the person's performance with routine procedure or skill. The individual can be asked to go through a particular series of steps (ordering procedures, security procedures, facility maintenance procedures as required for swimming pool operations etc.) and the employees' accuracy in following correct routine scored in accordance with the standard.

4. Ratings of complex behaviors. In some instances job performance requires responses which occur without predictable sequence. Teachers fail in this category as do many other service oriented professionals where job performance simply does not fall into specific behavior sequences. In these instances, major aspects of the position are analyzed and a rating is developed which attempts to provide an index with reference to each of the major aspects.

5. Performance records. Some positions are such that summary records of performance of one or more aspects of the job are available. In sports sales, the annual sales of each sales person produces an objective record of that person's effectiveness. Although this fact alone may not accommodate external sources of variance (service in a coal mining region during a long strike vs. service in a college community with a high percentage of sports oriented college age students) it is a useful measure when systematic biasing factors are not present.

6. Academic grades. Academic grade point average has been traditionally one of the most used, most studied criterions, probably because of its summary qualities as well as its availability and its quantitative characteristic. High school grades predict college grades (.55) (Jacobs and Manese, 1977, p. 18). As a short term or intermediate term criterion, grades may well be one of the more available measures, especially if those grades associated with program goals are used for prediction of ultimate performance. However, a recent study reported in Journal of Experimental Education by James and Dumas (James and Dumas, 1976, p. 43) indicates that beyond a certain level of demonstrated academic competence (2.5 in their study with University of Missouri students) the G.P.A. offers little information about a student's potential success as a teacher. Grades may be a useful criterion for dichotomizing those unlikely

to be successful from those likely to succeed. However, it would seem that assuming a higher level of success as a corollary of higher G.P.A. may be presumptious.

7. Supervisor/employer ratings. Although a not highly recommended criterion due to the problems of bias, reliability, and relevance, in some instances, by necessity, the rating must be utilized as a criterion. When essential, the rating should be developed with particular attention to concrete references to data in the form of observations, tests, performance records, and other objective measures.

8. Administrative actions. Promotions, merit recognition, and other forms of positive reflection upon a person's job performance as well as reassignments of less complex tasks, failure to advance, lateral moves and other negative reflections upon performance may be a form of evaluating performance that can be incorporated into multiple criteria selection.

Whatever criteria are selected, each must adhere to established standards. That is, criteria must be reliable, free of bias, practical in terms of accessibility and cost, predictable - - and of course, they must measure qualities and abilities required for performance of the non-teaching physical education position.

In the study by Freeberg mentioned earlier, criteria measures were selected under several constructs. Shortterm criteria included:

a. Vocational awareness and planning skills (e.g. knowledge of various ways to seek a first job, ratings of the quality of short and long term job plans).

b. Personal-social adjustment (i.e. getting along with family, staying out of trouble with police, family feelings about trainee, number of people giving a hard time etc.)

c. Work motivation (willingness to accept jobs less desirable, long term job plans, ability to perform desired job, etc.)

d. Work training program adjustment (work-site absences, proficiency ratings by counselors, work site-supervisors and peers, etc.)

e. Vocational confidence (measured by a seven item scale). These measures reflect Freeberg's efforts to examine criterion factors for short term program completion. They were selected based on direct observation of programs, interviews with people most informed about program operations, and from enabling legislation and federal standards that provided the basis for the training program. Intermediate term program criterion measures were selected in the following areas:

a. Extent and level of employment (employment status, hours worked per week, starting salary, etc.)

b. Job performance and adjustment (salary raises, employer proficiency ratings, number of jobs held, etc.)

c. Personal-social adjustment (amount of trouble with police, family feelings about enrollee, number of people giving "hard time", etc.)

d. Vocational motivation and planning (time required to find the first job, number of sources used, level of short-term job plans, etc.)

This example of one approach to criterion development serves as an excellent illustration for those interested in determining program effectiveness. In the Freeberg study, 32 performance criteria of the short term variety were obtained and 40 measures of intermediate (six months after completion of the training program) were collected. This extensive examination of relevant dimensions of performance illustrates the need to examine many behavior indices.

SUMMARY

As we begin the process of criteria selection for each new physical education program option, we first must attempt to comprehensively examine the position a product of this program may be expected to hold. While it may not be possible to define this position in precise terms at this juncture, some rational judgement concerning the specific nature of the position will be required. The position will need to be considered in terms of performance requirements as well as in terms of its potential for job satisfaction for a given individual. Whereas measures of ultimate criteria are ideal, in our initial stages of criterion research, more than likely our efforts will be directed toward short term measures which will be materializing early in the development of our non-teaching programs. Practicum experiences offered as program correlates may be evaluated by specific observer scored measures where procedures can be checked, operations are sequential and tasks can be analyzed into component parts. According to Hill and Anthony (Hill and Anthony, 1976, p. 309) "A good predictor of one's ability to profit from an extended training experience is a measure of how well one can profit from a brief but smiliar training experience." As products of these programs find their way into positions for which they are prepared, and as they function in these positions for a period of time, intermediate and ultimate criteria may be evaluated for potential usefulness. Hopefully, our efforts will yield high returns in the form of relevant yardsticks for evaluating our products and the success of our new programs.

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15. Statistical Techniques for the Prediction of Success

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The processes of selecting, retaining and advising students can be considered problems of prediction. That is, we are interested in predicting which students are best suited for specific areas of study. Intuition and statistical techniques provide two possible approaches to the prediction problem. The results of an interesting series of studies by Kahneman and Tversky (1973) demonstrate that intuitive predictions are often erroneous. This occurs because people often ignore the prior probability of a given outcome and depend upon unreliable information. In fact, people utilize prior probabilities only when no specific information is given. When worthless specific evidence is given, prior probabilities are ignored. For example, given a fair coin and the information that the last 10 tosses have been heads - a majority of the people predict heads on the next toss regardless of the .5 probability. Expectant parents who already have five girls who believe that this one will be a boy provide yet another example of this phenomenon. In addition, Kahneman and Tversky's (1973) results suggest that we are prone to experience confidence in highly fallible judgements. For example, many of us experience great confidence in our prediction of the future performance of a candidate after an interview, despite our knowledge that interviews are notoriously fallible. We often demonstrate this same confidence in positive letters of recommendation and admit students to our programs who have low standardized test scores and low GPA's.

Since prediction based on intuition can often be misleading, statistical techniques are important tools. This paper will present some statistical techniques which can be utilized for prediction. The presentation will be limited to general comments about the techniques. No attempt will be made to present formula or computational problems. It should be noted that supplemental information for these techniques is available in many standard multivariate statistics books, for example, Kerlinger and Pedhazur, 1973; Cohen and Cohen, 1975; and Draper and Smith, 1966.

Regression is the most widely used statistical method for prediction Both simple regression, which expresses the influence of an independent variable on a dependent variable, and multiple regression, which expresses the influence of several independent variables on a dependent variable, have been used extensively. Regression is a powerful and flexible statistical tool which can handle both active (experimental) and attribute (measured) variables (Kerlinger & Pedhazur, 1973).

Prior to a discussion of some of the technical considerations that are necessary for multiple regression, a brief and simplified review of the technique might be helpful. Scores for independent variables or predictors

and the dependent variable or criterion are obtained for a group. A regression analysis is performed on this data. The results of this analysis are multiple correlation coefficients (R) and regression equations. R has a range from 0 to 1 and is usually interpreted as R^2, which indicates the percent of the criterion variance which is expalined by the predictors. Given predictor scores for a new group, the regression equation can be used to predict the criterion scores.

For example, if a physical education program wishes to develop a selective admissions procedure which uses high school GPA, demonstrated skill in selected physical activities and faculty evaluations as predictors of success in the physical education program as measured by the GPA in major courses, high school GPA, skill measures and faculty evaluations will be obtained for a group of students. These students will complete the program and their GPA for major courses will be calculated. A regression analysis will be conducted on this data. The resulting regression equation can then be used to selectively admit new students by predicting their GPA in major courses from their high school GPA, skill measures and faculty evaluations. Within the general framework, it is necessary to consider the selection of predictors, the evaluation of predictors and cross-validation. (It should be noted that the information on criterion selection that Dr. Uhlir, presented in the previous paper is also an important consideration for multiple regression analysis). A primary consideration for regression analysis is selecting predictors and a criterion score which are reliable. If predictors are unreliable, the results of the analysis are not meaningful, since they are based on error. Thus, it is important to estimate the reliability of both predictor and criterion measures. Standard methods are available for estimating reliability.

Predictors should be chosen which correlate highly with the criterion, but that have low intercorrelation. Suppressor variables are an exception to this rule, but they have more theoretical than practical importance (Lord & Novick, 1968). If all of the intercorrelations for predictors were zero, the interpretation of regression coefficients would be greatly simplified. However, this is seldom the case in our research, so we must be aware of the difficulties that are created by correlated predictors. The major problems are that the addition of variables to the regression equation results in decreasing prediction payoff and different orders of entering varaibles into the regression analysis results in different regression coefficients (Kerlinger & Pedhazur, 1973).

When predictors are correlated, the incremental value (or prediction payoff) of a given predictor is important. That is, the degree to which the multiple correlation is raised by the addition of the predictor to a set of predictors. It should be noted that the addition of an uncorrelated predictor to the equation, raises R by the amount that it correlates with the criterion. This is not true for correlated predictors since some of their relationship with the criterion is shared. Thus, in some sense, only the non-redundant portion of the variance is added to R. When a large number of possible

predictors are available, the aim is usually the selection of a minimum number of variables necessary to account for almost as must of the variance as is accounted for by the total set (Kerlinger & Pedhazur, 1973; Lord & Novick, 1968). It is seldom worthwhile to include many predictors since the incremental value of new predictors after a certain point is low because of the intercorrelations or overlap in content.

The incremental value of correlated predictors is dependent upon their order of entry into the regression analysis. That is, when correlated variables are entered, the one that is entered first contributed the largest amount. Fortunately, formal procedures (such as, forward selection, stepwise procedure and backward selection) exist which will aid the selection of predictor variables from a larger set of variables to produce the largest value for R^2. The forward selection and stepwise regression procedure are recommended when an initial set of predictor variables is expected to account for the criterion variance (Halinski & Feldt, 1970). An alternate approach is for the researcher to enter variables into the analysis according to a predetermined ordering, usually based on some theory, then calculate the multiple correlation and regression equation.

After the multiple regression equation has been determined for one sample from a population, it is necessary to determine how accurately this equation will predict the same criterion for new samples from the population. The calculated R^2 is almost always an overestimate and probably the best method for estimating the degree of shrinkage is to perform a cross-validation (Mosier, 1951; Lord & Novick, 1968; Herzberg, 1969). This is done by using two samples. The regression analysis is performed on the first sample. R^2 and the regression equation are calculated. The regression equation is then applied to the predictor variables of the second sample, thus yielding predicted criterion scores (Y') for each subject. This predicted score (Y') is compared with the observed score (Y) for the sample' to check the adequacy of the regression equation.

The degree of overestimation of R^2 is affected by the ratio of the number of independent variables to the sample size. The larger the sample the more stable the results, some authors recommend at least 30 subjects per independent variable, while others recommend a total sample size of at least 400 subjects for multiple regression (Kerlinger & Pedhazur, 1973). This consideration is a convincing argument for limiting the number of predictors in the equation.

Multiple regression is a potentially useful tool for selecting, advising, and retaining students in teaching and non-teaching options. In order to obtain meaningful results, it is important to have a large sample, size, reliable predictors, reliable criterion and predictors which have low correlations. There are many published examples of prediction studies which have utilized multiple regression. This literature suggest that the search for predictors of academic performance (usually GPA) in college has been the most common query. Combinations of cognitive predictors typically yield R's between .5 and .6 (25 to 36% of cirterion variance) with the

addition of non-cognitive variables producing only minimal gains in predictability (Etaugh, Etaugh, & Hurd, 1972). Although we would like the R's to be higher, values of this magnitude provide useful information for real world decision-making.

While multiple regression has been the most widely used prediction analysis, discriminant analysis, canonical correlation and factor analysis are also potentially useful for prediction analysis. Discriminant function analysis is a regression equation with a dependent variable that represents group membership (Kerlinger & Pedhazur, 1973). The discriminant function assigns individuals to two or more groups based on predictor scores. For example, a discriminant function analysis could be used to assign potential sports journalism majors to successful student or not a successful student on the basis of their predictor scores. Canonical correlation is also a generalization of multiple regression. Canonical correlation allows us to specify multiple criterion scores as well as multiple predictors. Factor analysis is a method for reducing a large number of variables to a smaller number of presumed underlying unities called factors (Kerlinger & Pedhazur, 1973). These factors can then be used as independent variables in a multiple regression analysis. The utilization of these methods of data analysis may improve our ability to predict complex behavior, such as, teacher effectiveness. The specification of several criterion scores or the use of factor scores to reduce the number of independent variables may lead to better explanations of the phenomena we are attempting to predict.

These multivariate statistical techniques are all potentially useful for selecting, advising, and retaining students in our programs. Research is necessary to determine the predictors and criterion that should be used for each of our programs. This research should be conducted in a systemmatic manner and more than one institution will need to be involved if the results are to be meaningful. In conclusion, it is this author's regret that a simple set of predictors cannot be provided that will yield an R of 1 for all teaching and non-teaching options. However, all readers are reminded that our time tested intuitive methods also produce R's of less than 1.

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SECTION V. OUR CONSUMER - THE STUDENT

16. Student Interest in Non-Teaching Opportunities in Physical Education

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It comes as no surprise to professional physical educators that the teaching opportunities for physical education majors become less available with each succeeding year.

The following data verify the fact that school enrollments have declined in the past decade and will probably continue to decline in the next several years.

1. Decline in birth rate in late 1960's census figures list the size of the college -age group (18-21 year olds) today at about 15.5 million. Earlier projections were for 21-23 million by the end of the century but it now appears that in the year 2000 there will be approximately the same number as today.

2. The rate of students graduating from high school rose steadily for 15 years and peaked in late 1960's. This rate has now dropped back 3%.

3. The percentage of school graduates entering college was 62% in the late 1960's. In 1974 this was 58%.

4. The rate of students graduating from college was 57% in 1970 and 54% in 1974.

5. The percentage of college graduates going to graduate and professional schools was 24% in the late 1950's, 41% in the late 1960's and 30% in 1973.

As a result of these trends, and the increasing need for fiscal accountability, physical education professionals have been prompted to reassess their programs. High enrollments of physical education majors at colleges and universities continue to be the pattern, yet many students are unable to obtain employment.

Although the profession has been aware of these needs for several years, the problem is now receiving direct attention.

In an effort to obtain direct information from major students in physical education, a questionnaire was distributed to students at the University of Arizona and Arizona State University in the Fall of 1977. The questionnaire was constructed so as to obtain some feedback relative to other student occupational interests as teaching positions become more difficult to obtain.

Approximately 350 major students responded to the questionnaire. The total figures do not conform on every question, because some students answered only certain questions.

Results indicate that 154 male students and 207 female students responded to the questionnaire. Of this total number of 311 students, 190 students completed the questionnaire at Arizona State University and 121 students completed the questionnaire at the University of Arizona.

First of all, it was necessary to determine where the prospective students would like to be employed, if teaching positions are not available. Listed are eleven non-teaching options with the emphasis of interest for employment reflected by majors at University of Arizona and Arizona State University.

TABLE 1. PREFERENCES FOR NON-TEACHING EMPLOYMENT

	A. Highly Interested	B. Moderately Interested	C. Not Interested
1. Health Spa Mgmt.	91	151	114
2. Sporting Goods Salesperson	110	163	139
3. Sporting Goods Mgmt.	73	153	117
4. Sports Writing (Newspaper)	40	97	220
5. Sports Broadcasting (Radio - TV)	72	125	161
6. Sports Statistician	51	111	192
7. Physical Director of Girls' Club OR	145	98	79
8. Physical Director of Boys' Club	107	107	98
9. Physical Director of YWCA/YMCA	154	132	67

	A. Highly Interested	B. Moderately Interested	C. Not Interested
10. Executive Secretary of Girls' or Boys' Club	42	100	204
11. Executive Secretary of YWCA/YMCA	42	100	206

Listed below are occupations mentioned at least once by the students:

Athletic Training	9
Dir. City Recreation Dept.	5
Army Modern Pentathlon	
Coaching	
Sports Information	
Sports Medicine	
Sports Psychologist	2
Physical Therapy	
Adapted P.E.	
Play Pro-ball	
Teach at Country Club or Camp	2
Involvement w/AIAW	
Manager of Recreation Parks	
Movement specialist-dance, district-regional	
Exercise Physiology	
Sports Photography	2
Prog. Dir. Health & Recreation	
Swim Coach	2
Baseball	
Physical Therapists	
Private Track Club Spts. Program	
Athletic Club Work	
Preventive Medicine	
Nutrition Aspects of Health	
Nutrition Aspects of Health	
Coach/Player of Professional sports team	
Refereeing	
Teaching	
Sports Research	
Facilities Planning	
Athletic Administration	
Physical Director in School	
Recreation	
Buying/Selling School Equipment	

Working at a Tennis/Racquet Club
Officiating
Organize Health Club Corporation

Based on this interest survey, students prefer the following opportunities in priority order:

1. Physical Director of YWCA-YMCA
2. Physical Director of Girls' Club
3. Sporting Goods Salesperson
4. Physical Director of Boys' Club
5. Health Spa Management

Students were asked to rate what sports they would prefer to teach on a private basis. The final results indicate that, in order, tennis, racquetball and volleyball are the most popular activities, if a students were to teach privately.

TABLE 2. SPORT PREFERENCES FOR PRIVATE INSTRUCTIONAL OPPORTUNITIES

1. Tennis	-	141
2. Racquetball	-	138
3. Volleyball	-	133
4. Swimming	-	99
5. Badminton	-	85
6. Football	-	85
7. Gymnastics	-	68
8. Golf	-	55
9. Wrestling	-	40

Listed below are other physical activities mentioned as teaching possibilities:

Track	31	Soccer	8	Ice Skating/Figure Skating	2
Softball	23	Fencing	3	Hiking-Wilderness-Archery	4
Baseball	37	Waterpolo	3	Handball	
Basketball	32	Weight Lifting	2	Judo	2
Slimnastics	1	Dance	9	Lifesaving	
Exercise	1	Field Hockey	4	Scuba	
Diving	6	Cross Country	4	Jogging	2
Athletic Training		Skiing	5		
Yoga	2	LaCrosse			
Aikido		Synchronized Swimming	3		
Karate	2				
Cheerleading					
Rugby					

The number of private sports clubs is rapidly increasing in the United States. A primary example are clubs featuring racquetball courts with ancillary facilities. In 1970, there were approximately 500,000 participants in racquetball and about fifty private racquetball clubs. By 1977, this figure has grown to 5, 500,000 participants and nearly 300 clubs throughout the United States.

Those private club management opportunities most desired by majors were as follows, in order of preference.

TABLE 3.
PREFERENCES FOR CLUB MANAGEMENT OPPORTUNITIES

1.	Racquetball	185	5.	Golf Course	83
2.	Tennis	182	6.	Golf Driving Range	62
3.	Swimming	115	7.	Ice Skating Rink	40
4.	Gymnastics	88			

Listed below are sports or club-like activities which students mentioned as a possibility for employment:

Swimming	15	Track	6	Hiking	
Water Polo		Weight Room	2	Running	
Boxing		Diving Coach (Specialized		Bicycling	
Gymnasium		Spring Board)		Football	2
Military Athletics		Roller skating rink		Health Resort	
Volleyball Club		Bowling Alley		Exercise Spa	
Basketball	7	Dance Studio		Summer Camps	
Softball	6	Diving		Medieval Weaponry	
Running Club		Fitness Camps		Baseball	2
Wrestling	3	Volleyball	2	Baseball Pitching Machine	
Weight lifting		Country Club	2		

Students were asked if they would use a non-teaching physical education major as an entree to the business world. Two-hundred and six respondents replied yes and one-hundred and sixteen respondents indicated they were not interested in the non-teaching major as an entree to the business world.

The students were asked to list other career opportunities which might be of interest to them. These job opportunities are presented in Table 4.

TABLE 4.
INDICATED INTEREST IN CAREER OPPORTUNITIES

Teaching	4	Coach, Football	
Coaching	26	Coach, Wrestling	1
Trainer	5	Women's Athletic Director	3
Sports Medicine	5	Pre-School Psychomotor & Special Ed.	
Athletic Training	10	Programs for Alpinistic Sports	
Tennis Coach		Managing/Coaching Pro Sports	
Softball	2	Rec. Director	
Volleyball		Medicine	2
Sports Physchology		ComputerEngineer	
Basketball		Computer Business	
Track		Own Private Club	
Police Dept.	3	Insurance Sales/Real Estate	2
Physical Therapist	8	Performing Dance	
Paramedic-injury professions		Teaching Dance for muscle Control	
Research in Physiology/Kinesiology	3	Legal Secy.	3
Pro Football official - Managing/coaching		Physical Rehabilitation	4
Photography	3	Jogging/RunningClub	2
Wood or carpenter	2	Floristry	
Disk Jockey		Designing	
Flying - Airforce		Special Ed. Teacher	2
Flying - Airlines	2	Small Business	
Spas for lift. weights & Cond.		Wildlife Manager	
Consultant for Health		Interior Design	2
Working on a Prof. team	3	Forestry	3
Health Field worker		Salesman	
Journalism	2	Church work	
Counselor	4	F.B.I.	
Environmental Design		Medical Technician	
Teaching at a private club		Airlines	2
Recreation	5	Dietician	
Camps		Broadcasting	2
Director of P.E.		Park & Rec.	2
Family Camp Director		Umpiring	
Dir. of Boys Club		Bus. Program Dir.	
Political Science			

TABLE 4. (cont'd)

Business Administration	
Sports Information Director	
First Aid Safety	
Training Military	
Major League Baseball	
Major League Football	
Sales Rep. for Athletic	
Private Club for Business Men, etc.	
Specialist/Consultant for Individuals & Teams	
Exercise Physiology	3
Nutrition/Exercise	
Social Work	2
Dance	2
Art	2
Camp	
Health Centers	
Sports Advertising	
Pro Sports	2
Golf - Professional	
Athletic Director	3
Business/Marketing	1
Clothing Mdse.	2
Dental Tech.	
Counseling	
Commerical Graphic	
Rec. Therapy	
Athletic Admin.	1
Sports Clubs	
Dir. of Company	
Probation Officer	
Music Teacher1	
Baseball	
Bowling	
Hockey	
Guidance	
Science	
Hiking	
Back Packing	
Psychology	
Business Education	
Urban Planning	
National Parks	
Elementary teaching	
Pro-tennis	
Music Teacher/Hist. /Research	
AAU Coach/Private Club Coach	
Business Personnel Mgmt.	
School Administrator	
Accounting	
Seamstress	
Sports Therapist	
Exercise Technician	
Art Teacher	
Build Athletic Club	
Speech Teacher	
P.E. for the Deaf	
Owner of Health Club	
Physical Fitness Program	
Drama	
Osteopathy	
Adapted P.E. Teacher	
Teach small college	
Advertising & Design	
Working w/the aged	
Dance Instructor	4
Carpenter	
P.E. Teacher	4
Research	
Sports Club	
Real Estate	
Handyman	
Business	
Sales	
Sports	
Special Ed. L.D.P.E.	
Marine Biologist	
Modeling	
Philosophy of P.E.	
Scuba Instructor	
Professional Hang-glider	
Player Agent	
Professional Scouting	
Officiating	
Private Business	
Marketing	
Statistician	
Sporting Goods	
Jr. Golf Program	
Spanish Teacher	
Ski Resort Mgmt.	
Race Track Mgmt.	
Pool Design	
Academic Education Instructor	
Working with Elementary Children	

Finally, students were asked if they had a choice of employment, which profession would they choose, teaching physical educatior./coaching or one of the positions listed under non-teaching options. Two hundred and seventy-one stated they would prefer to teach, whereas, sixty-two students said they would prefer a non-teaching position.

While the response to this questionnaire represent only a small sampling, there is evidence that students are b e ginning to investigate non-teaching options. There is little doubt that most beginning physical education majors desire to teach physical education or coach one of more sports. But the realities of the teaching professsion point out the fact that fewer and fewer teaching opportunities become available each year, while the number of graduating physical education majors remains constant or even tends to increase.

If these students are to have an opportunity in the employment market, high school counselors, college and university advisors and administrators must take a close look at new employment opportunities for physical education majors. The eventual curricular options will reflect alternate academic tracks which will allow these students greater opportunities for employment upon graduation.

17. Job Markets and Career Placement in Non-Teaching Options in Physical Education

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University of Kansas

The new awareness of the important role played by physical fitness regarding preventive medicine, productivity and just plain enjoying life has brought about a need for skilled persons to assist knowledgeably in the attainment of goals by society and by individuals. "I just feel better," I'm not as tired as I used to be at the end of the day," "For me it's a new found freedom to be able to walk up the hill and not be totally exhausted," and "I don't get a feeling of being depressed," are common statements which can be heard from persons who have been able to develop some kind of personal fitness program. The positive physical change is usually matched by an equally positive psychological outlook change.

One of the most encouraging recent trends is the growing interest by business and industry in the fitness of their employees. This makes good sense from a management viewpoint. Company-sponsored fitness programs tend to reduce absenteeism, accidents, and sick pay. Corporations are finding that employees in good physical condition are more alert, more productive, and have higher morale.

Broad research regarding non-teaching opportunities for physical education majors often begins with a review of the Dictionary of Occupational Titles and the Occupational Outlook Handbook. By no means should these sources be considered as any more than search beginning resources. The information is generalized and will lack in specifics but will serve as a base for creative thinking and allow individuals to develop an organized plan in reviewing the market. Some of the common job titles of interest to physical education majors one might expect to find in the Dictionary of Occupational titles are: athlete, athletic trainer, coach, athletic scout, public health education, community services and health education officer, recreational therapist, recreation supervisor and administrator. If you were to search further for specifics by consulting the Occupational Outlook Handbook you might find, for example, that the responsibilities of a recreational supervisor/leader job would be listed as (1) organize and lead social and physical education programs in the community, (2) manage recreation facilities, (3) evaluate the recreational needs of the community and plan/lead programs to meet those needs (4) instruction in sports, arts, crafts, music (5) camp counselors, and (6) organizing city sports leagues for children and adults.

After reviewing this literature your thoughts would probably turn to places of employment and the list might read (1) Government (city, state, National Parks, etc.) (2) community centers (YMCA, etc.) (3) churches (4) schools (5) armed forces (6) athletic and scouting organizations (7) camps and (8) resort hotels.

There is nothing wrong with this broad beginning approach to conducting an effective search for a place to launch a career, but it should trigger all possible imaginative and creative ability toward looking in areas not normally considered as possible places of employment. For example, most corporations have training programs to helppersons who have a broad educational background become skilled in specific jobs that will be mutually rewarding to both the corporation and the individual. Most companies have brochures available in University Placement Offices specifying the kind of majors they are looking for to go into training programs as well as those with technical degrees. There is no reason that a physical education major, especially one who has made wise use of his electives can't go into any training program suggested for those with Liberal Arts degrees. Positions in marketing, personnel, public relations, and advertising commonly utilize persons who have a broad educational background, The physical education major has the added advantage of an image of "wholesomeness" which is associated with someone interested in physical fitness.

It should be mentioned that the candidate must also be aware that some employers view persons who have chosen this area of study to be less competent than some of the students in what they feel might be more difficult academic fields. The candidates, therefore, assume an added responsibility of educating employers about the truly scientific nature of a physical educatior degree and of convincing them that it does provide a well-rounded education.

We can only look at the "market" briefly before we realize that exploration can be exciting and uplifting if the individual is properly prepared to present him or herself. The candidate must be aware of what employers are looking for. In a survey of more than 200 employers who recently took part in a seminar at Northwestern University, it was found that six factors were primary in the selection of college graduates for employment. Considering all fields of study these are the factors ranked in order:

1. Personal qualifications including maturity, initiative, enthusiasm, poise, appearance and the ability to work with people.

2. Scholastic qualifications as shown by grades in all subjects or in a major field.

3. Specialized courses relating to a particular field of work.

4. Kind and amount of part-time or summer employment while in college.

5. Experience in campus activities, especially leadership and participation in extra-curricular life.

6. General or liberal arts courses designed to provide a broad and cultural background.

Granted, the degree is important, but in the final analysis, employers are hiring an individual. Constantly we are reminded that the ability to work with other people and the ability of self-expression, both written and orally, are most important and are heavily considered.

The primary concern of a candidate beginning a search for a rewarding career should be presenting him or herself to prospective employers effectively. A complete résumé providing enough information to enable the employer to make a wise decision is absolutely a first essential. Included should be educational background, extra curricular activities, work experience and any information which will show that the individual has demonstrated good judgement, the ability to deal with responsibility, leadership, enthusiasm and the ability to work with people.

Since the employer will watch for signs of creativity and imagination as well as signs of organization, these qualities should be demonstrated throughout the search. Careful preparation of all written materials exchanged, including application letters is a must.

University Career Planning and Placement Offices can be of valuable assistance to the graduating physical education major. Unfortunately these majors often view the placement office as being of value to only engineers and accountants but this is not true. Many employers will be happy to talk with majors which have not been requested if they have a cancellation or their schedule is not full.

The need for recreation workers is rising as America's leisure time is increasing. More than 65,000 were employed in 1974 (nearly one-half were women), and this number is expected to increase. The educational requirements will also get stiffer as the need increases.

18. A Report on the Iowa State University Career Opportunities Conference

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In common with most institutions in this country, there was a marked increase in the number of physical education students who were unable to find jobs after graduating from Iowa State University in the Spring of 1976. Subsequent discussions between faculty and students revealed that job placement was a major concern of almost all undergraduates in the physical education program. Therefore, the consensus of faculty opinion was that a concerted effort should be made to ensure that current and future students should be well prepared for the current and predicted job markets.

As a first step, the Department of Physical Education sponsored a two-day Career Opportunities Conference. The success of the conference has been gratifying to everyone concerned, and it is hoped that our experiences may encourage other institutions to attempt similar ventures as part of the professional preparation of students of physical education.

Planning for the Conference started more than six months before it actually took place. A committee and various sub-committees were convened in order that all aspects would be efficiently handled and that the work involved would not prevent faculty members from fulfilling their normal responsibilities. The vast majority of all faculty members, both full and part-time, were involved in one way or another.

The objectives of the conference were defined as follows:

1. To expose students to the wide variety of employment opportunities available to physical education graduates.

2. To encourage students to plan their University experience in such a way as to be well prepared for specific employment opportunities.

3. To familiarize students with the procedures and skills necessary for successfully obtaining employment.

The program was then designed in such a way as to meet these objectives. A list of the many employment opportunities available to physical education graduates and a list of job planning strategies and job securing skills were compiled from information gathered from students, faculty, alumni and employers.

Knowledgeable individuals in each of the defined areas were contracted, and eventually, appropriate resource persons who were prepared to help with the conference were recruited from both the local area and from other locations in the United States.

The conference was given appropriate publicity and the printed program was given to all students in the department and sent to all participants and invited guests from neighboring institutions. A pre-registration period allowed each student to sign up for workshops of his or her choice and ensured that adequate space was available in each of the workshops and presentations.

The conference was held at the Scheman Continuing Education Building in the Iowa State Center. This new facility was designed to accommodate a wide variety of functions including conferences such as ours.

At registration on the first day of the conference, participants received a packet of resource material to be used both during and after the conference.

The keynote speech for the program was given by Marie Wilson, the Director of Women's Programs at Drake University. Her topic was "Assertiveness," and the outstanding presentation set a positive theme which pervaded the whole of the two-day event.

Later, a panel comprised of a public school vice-principal, teachers from regional elementary and high schools and students who had just completed practice teaching discussed 'The State of the Profession." The panel attempted to present a candid overview of the contemporary situation in physical education and also the advantages and disadvantages of choosing a career in physical education.

After a lunch break, the featured speaker was Glenn Swengros, who at that time was a vicepresident of Health Industries. Glenn gave a fascinating account of the opportunities available in commerically operated fitness programs.

During the mid-afternoon, each student attended two workshops of his or her choice. Each workshop was designed to explore a variety of opportunities within a broad area of interest. These areas of interest included Health, Communications and Publications, Recreation and Athletic Coaching. A further workshop consisting of a heterogeneous group of areas was listed under the title of "The Variety of Alternatives." This workshop included resource persons who were involved with the military, the sale of sporting goods and life insurance and the private teaching of sport skills such as skiing and SCUBA diving.

The final presentation of the first day was given by Mr. Raymond Walsh, the Recreation Director of the Eastman Kodak Company, Rochester, New York. Mr. Walsh gave a lavishly illustrated description of recreational programs in a large corporation.

The second day of the conference was designed to provide valuable experiences which were appropriate to the clasification of the student. Freshman and sophomores examined the advantages of long-term professional planning. A workshop entitled "Job Seeking Strategy" dealt with the factors involved in choosing a study plan which would incorporate course work that would be of maximum value in a chosen career. Other workshops entitled "Vacation and Part-time Employment," "Overseas Education" and "Officiating" gave students the opportunity to learn about activities which can concurrently broaden professional preparation by participation in activities outside of conventional program of study.

Juniors and seniors attended workshops which dealt with the more immediate problems of finding employment. Three workshops entitled "Utilizing the Placement Office," Writing a Résumé and a Job Application" and "Interviewing for a Job" were designed to teach the procedures and skills necessary for locating opportunities and, subsequently presenting prospective employers with appropriate, personal information. An additional workshop "Teaching in Private Schools and Overseas" was added for upperclassmen who wished to examine alternative teaching opportunities.

In addition to the formal presentations and workshops, there were a number of displays and opportunities for interaction with resource persons, both individually and in groups. Finally, arrangements were made for prospective employers to interview interested students for permanent and vacation employment.

After attending the final workshop, each student was asked to complete a questionnaire as a part of the evaluation procedures planned for the conference. Over two-hundred individuals attended various sessions of the program; this number included more than 170 students. All of the students who completed the questionnaire reported that the conference was "valuable and informative." Job securing skills, panel discussions and workshops were rated as being the most important sessions. The great majority suggested that the conference should be repeated either every year or very other year. Many students indicated that, during the conference, they had found some "new" area of interest in "Recreation Related Fields" (50%) or in "Health Related Fields" (20%). There was a definite shift towards a more optimistic view of securing employment. Most students (92%) indicated that they had broadened their range of knowledge about job opportunities and 14% were considering a change in major as a result of the conference.

In response to student suggestions, the Department of Physical Education has already held the first in a series of annual seminars on "Writing a Resume and a Job Application." Further seminars are planned and another conference is scheduled for 1979.

19. If You're Not a P.E. Teacher, Then, What Are You?

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Editor's Note: The following presentation is a personal account of a recent physical education graduate who has, by necessity, adapted her skills for survival in today's work world. The author reflects on her professional preparation as a non-teaching certified physical educator and manifests an attitude which carries a message for all involved with professional preparation. The account is presented in first person form, as originally delivered, so as to not jeopardize the potential impact of the essay.

There was no doubt in my mind that after I graduated from high school I would enter college to learn how to become a "gym" teacher. I had been the tomboy who had never grown up - who had stuck with the notion that sneakers and shorts were a way of life - my life. I wanted to share with others what I had learned - to impart the joy of loving your body, your self, during volleyball, tennis, handball and any sport; to capture my energy for moving and direct it into the lives of others.

There was no doubt - I would major in physical education and return to the high school level to become a gym teacher. How else could I share my love for moving?

Ah - but maybe I should have heeded the question asked of me by the head of the physical education department at my high school. Just before graduation she asked me, "Are you going to major in art in college?"

Art? Where had she been those past four years? Sure, I drew and lettered the posters for club and team meetings, so what? And on occasion I did some composition through the lens of a camera when activities were going on, but what in the world does art have to do with sports?

Off to college - there was no doubt in my mind what I wanted to do.

To make an endless story shorter, I soon discovered the camera on my shoulder carried more weight in my mind than did a teaching certificate. In fact, I found the two were hardly compatible. I opted not to follow the structure of the professional preparation courses.

Even though I helped others when it was time to provide bulletin board photos and materials for student teachers who needed to dress up their locker rooms, teaching was no longer my goal. My ideal of what career I wanted, changed.

I video taped classes, learned how to use a studio television camera, worked as a photographer for the newspaper and yearbook at school and the paper in town and was even labeled a "jock sniffer" by a professor who thought my only desire was to photograph that which I could not do, myself.

I received my bachelor's degree in human movement and psychology and sent out 100 résumés to anything from magazines to sports equipment companies. The responses were typically form letters.

I had tried how I had known to get a job. It wasn't enough. I got nowhere.

So, I worked for a few months as a clerk in a photo retail store: was an inspector for the remainder of the year in the company's photo finishing plant in a different part of the state: went back to school on a graduate assistantship for a year and thoroughly enjoyed using the audio visual equipment and teaching at the college level; applied for a job as a sports information director and found out a journalism degree was one of the pre-requisites (hum...): worked in " the cage" giving out equipment after my assistantship ran out: new résumés, old responses: enrolled in another graduate program: worked part-time in the school news bureau and on the local paper: and then, for all intents and purposes, dropped out of school to assume my current position - a full-time job - on a newspaper.

In the sports department? No, as the family page editor.

If you're not a P.E. teacher, then, what are you?

Standing back and away from it all, I can get a different view. It was not the same when I felt trapped by the unknown - by knowing more of what I did not want than what I did want.

I'm more able now to stretch my thoughts, imagination and impressions to uncover what physical education is to me, and what I can do within it - rather than plot ways to be rid of it forever - something I cannot do.

Play, sports, physical education, athletics, movement experiences - regardless of the name, it's alive for most, if not all of us.

But who is it that' s looking at the person playing? Is it the parent who sees I'm outside when I could be *doing* my math homework? Is it the

instructor who notices my efficient motions? Is it the newspaper person who sees a story on school budgets and cost of equipment? Is it the athletic trainer who sees a twist in my ankle at an improper time?

What vantage point is taken? When one talks about physical education, what is one saying?

Something is happening both inside the player and any viewer when sports are involved. There's an inner spirit one feels. A sensation that is timeless - at least for the moment.

I dare you to twist the world as you see it. Get to the top of a "possibility", a "maybe", an "if". Reach for the possibility, maybe, if of what physical education can be. Find what each of us can do within it. Any enjoy the ride.

I have a friend who is teaching science in a junior high school. The year before, she had been teaching physical education: that is, until she was excessed.

Someone else I know found the job market for both coaches and teachers to be very tight, though by knowing the right people, a few others did squeak by. She found a factory that was willing to hire her - after convincing the personnel manager she wouldn't skip out after a few weeks.

And there's this certified athletic trainer who is out driving a bus route because her field was saturated. And another guy who gave up on physical education all together and has gone to another school as a student to do who-knows-what. Not to mention the one who now is employed to perform autopsies on animals because tenure wasn't granted. Or the sports information director who may be forced to get a masters degree in business administration so she can earn a decent salary and work reasonable hours.

Exceptions? These people are real.

Any one of us who is a part of physical education is part of an image - an image with a stigma.

What use is P.E.? Why do I have to wear a uniform? Why did my daughter flunk P.E. - she's not uncoordinated? Who cares about volleyball anyway? What good is it? The whole subject is unnecessary. If someone wants to play, what is there to teach?

The first and last stronghold in physical education - the profession of teaching. But what happens when even that is questioned, and no one bothers to listen for an answer?

We're part of an image. An image that needs to change. An image that needs to take on new proportions and thresholds. We need to create a new awareness of what is involved in physical education - and w e have the resources under our own roof - we just haven't used them. They've been overlooked and ignored.

We've lost the descriptive poet to the English department; the team manager went on to be an accountant instead of moving into professional sports; the player disgruntled at the large grip on the tennis racquet tossed the equipment aside, instead of designing a new model; the photographer made sports a hobby instead of a career; the history buff slid over to the other department; and why not? if that's where the opportunities are?

Caught up in not knowing what went wrong. We've been teachers and coaches, and it has always been safe. Now, it appears we must justify our programs. Justify our existence, There is a solution.

The way out is through the way in. Take a look at what has been done, and see how one can add to it.

Advance on the problem areas and wrestle with the ideas in each. There are alternatives and ways to compromise. Playful interaction can occur as a change from conflict or failure to take the time to understand.

I can look out at what I've done - my jobs as a clerk, inspector, editor, photographer and seek that moment when they will blend together, and work and play will be synonymous with a change to sit back and look out once more at how physical education is changing, and to where the changes will lead.

I've followed the subtle flow, searching for the connections between what I see now, and what could be. I've caught glimpses of the beauty and unity that P.E. can have within and among its organized members and between those on the inside looking out, and the people on the outside, looking in. A reflection of a future possibility.

The force of movement; its power. Motion and emotion driving hard against one another, until a unique form is created. Not static, but swept with an ever-evolving image, encompassing the vantage points of each viewer, without grinding down to the base each time physical education is questioned.

Follow the wave of tomorrow today. Land on the shore of open options. Old ideas take on new shapes without resisting. Underneath is a simple stru cture that holds together the many layers on top - a natural wonder where there's room for everyone who is willing to bend.

Those of us who can visualize the non-teaching options in physical education need to brainstorm and discuss how to provide more hands - on training in the form of field work and internships; need to uncover how we appear to those who wouldn't know the difference between AAHPER and a fur coat; need to examine our own qualifications on job description forms to notice if we're discriminating against people in our own field; need to synthesize the personalities, skills and abilities of those with whom we are housed; need to take the lead and not wait until additional cues are given by dissatisfied consumers and graduates.

A new day. A new image. The chance to spark each other and draw from the strengths we have yet to tap; sports broadcasting; majoring in a sport; accepting extracurricular work for college credits; building a program around a student, instead of the opposite. Intertwining fields and disciplines. Finding a way for the hard surfaced to complement one another. Lending an ear when someone else is speaking, because even when it seems you're worlds apart, there can be a common outlet - a way out, to a way in.

I can be happy.

I can show my joy.

I can hang in there with my camera, a pen and physical education.

APPENDIX A

TABLE 1 - 9

NASPE COLLEGE COUNCIL

NEW OPTIONS IN
UNDERGRADUATE PROFESSIONAL PREPARATION

TABLE 1

ALABAMA
Auburn University

ALASKA
University of Alaska-Fairbanks

ARIZONA
Arizona State University
University of Arizona

ARKANSAS
Arkansas State University
University of Arkansas

CALIFORNIA
Calif, State University-Sacramento
San Jose State University
California State University-Long Beach

COLORADO
University of Colorado
Colorado State University

CONNECTICUT
University of Connecticut
Central Connecticut State College

DELAWARE
University of Delaware

FLORIDA
University of Florida
Florida State University

GEORGIA
Valdosta State College

HAWAII
University of Hawaii

IDAHO
Idaho State University

ILLINOIS
University of Illinois
Eastern Illinois University
Western Illinois University

INDIANA
Ball State University
Indiana State University

IOWA
University of Iowa
Iowa State University

KANSAS
University of Kansas

KENTUCKY
University of Kentucky
Eastern Kentucky University

LOUISANA

MAINE

MARYLAND
University of Maryland

MASSACHUSETTS
Springfield College
University of Massachusetts

MICHIGAN

MINNESOTA
University of Minnesota

MISSISSIPPI
University of Southern
Mississippi

MISSOURI
Northeast Missouri
State University

MONTANA

NEBRASKA

NEVADA
University of Nevada -
Las Vegas
University of Nevada - Reno

TABLE 1 (cont'd.)

NEW HAMPSHIRE
- Plymouth State College

NEW JERSEY
- Rutgers University

NEW MEXICO
- Eastern New Mexico University
- University of New Mexico

NEW YORK
- Teachers College Columbia University
- State University College at Brockport
- Hunter College of the City University of New York

NORTH CAROLINA
- Appalachian State

NORTH DAKOTA
- University of North Dakota

OHIO
- Ohio State University

OKLAHOMA

OREGON
- Portland State University
- Oregon State University

PENNSYLVANIA

RHODE ISLAND
- Rhode Island College

SOUTH CAROLINA
- University of South Carolina

SOUTH DAKOTA
- Northern State College
- University of South Dakota

TENNESSEE
- Middle Tennessee University
- University of Tennessee

TEXAS
- University of Texas - El Paso
- University of Houston

UTAH
- Brigham Young University
- University of Utah

VERMONT
- University of Vermont

VIRGINIA
- University of Virginia

WASHINGTON
- Washington State University
- University of Washington

WEST VIRGINIA
- West Virginia University

WISCONSIN
- University of Wisconsin - La Crosse

WYOMING
- University of Wyoming

TABLE 2

LIST OF NON-TEACHING
PHYSICAL EDUCATION OPTIONS

CORRECTIVE THERAPY	COMMERCIAL SPORTS
HEALTH SPA	SPORTS COMMUNICATION
SPORTS ADMINISTRATION	MARKETING
SPORTS BROADCASTING	COSTUME DESIGN
SPORTS JOURNALISM	BUSINESS MANAGEMENT
GENERAL (LIBERAL ARTS)	RESEARCH TRAINING

INTERDISCIPLINARY

INTRAMURAL AND SPORTS CLUB SPECIALIZATION

PHYSICAL EDUCATION FOR AGING

PHYSICAL EDUCATION FOR EARLY CHILDHOOD

PHYSICAL EDUCATION FOR CORRECTIVE INSTITUTIONS

PHYSICAL EDUCATION FOR EXCEPTIONAL

PHYSICAL EDUCATION FOR INDUSTRY

SPORTS CLUBS (TENNIS, RACQUETBALL, ETC.)

PROFESSIONAL GOLF MANAGEMENT

URBAN COMMUNITY PHYSICAL EDUCATION

CARDIAC REHABILITATION

EXERCISE PROGRAM DIRECTORS

TABLE 3

GENERAL

COLLEGE OR UNIVERSITY	NUMBER OF STUDENTS ENROLLED	YEAR ESTABLISHED	GRADUATES PLACED
Appalachian State University	20-25		
Arizona State University	50		
Brigham Young University	15	1974	4-5
California State University - Sacramento (Biodynamics)			
Eastern Kentucky University			
Eastern Illinois University			
Indiana State University			
Iowa State University			
Northeast Missouri State University			
Rutgers University			
University of Delaware	30	1970	
University of Houston	12	1976	
University of Illinois-Chicago	50	1972	50
University of Iowa			
University of Kansas			
University of Kentucky	2	1976	
University of Maryland			
University of Massachusetts (Exercise Science)			
University of Utah			
University of Wyoming		1973	
West Virginia University	100		

TABLE 4

SPORTS ADMINISTRATION

College or University	Number of Students Enrolled	Year Established	Graduates Placed
California State University - Long Beach	10	1970	2
Indiana State University			
Oregon State University	20	1971	
Rutgers University			
State University College at Brockport		1975	
University of Connecticut	6	1976	
University of Maryland			
University of Massachusetts			
University of Wyoming	4-8	1973	
Western Illinois University			
West Virginia University	5	1974	

TABLE 5

PHYSICAL EDUCATION FOR EXCEPTIONAL

College or University	Number of Students Enrolled	Year Established	Graduates Placed
Arizona State University			
Brigham Young University	12	1973	Quite a few
California State University - Long Beach	20	1976	
Central Connecticut State College			
Colorado State University			
Indiana State University			
Springfield College		1972	
University of Colorado			
University of Connecticut		1961	
University of Hawaii		1973	
University of Maryland		1974	
University of South Dakota		1977	
University of Wisconsin - La Crosse			

CORRECTIVE THERAPY

California State University - Long Beach	25	1975	100%
Indiana State University	10	1965	100%
Eastern Kentucky University			
University of Illinois - Chicago	35	1973	35
University of New Mexico			

TABLE 6

SPORTS BROADCASTING

SPORTS COMMUNICATION

College or University	Number of Students Enrolled	Year Established	Graduates Placed
Colorado State University		1977	
Oregon State University	5	1971	
Rutgers University			
University of Colorado			
University of Connecticut	2	1976	
University of Iowa	3	1976	
University of Maryland		1974	
University of Massachusetts			
University of Wyoming	0	1973	
West Virginia University	10	1974	

SPORTS JOURNALISM

Iowa State University			
Rutgers University			
University of Colorado			
University of Connecticut	7	1976	
University of Iowa	3	1976	
University of Maryland		1974	
West Virginia University	10	1974	

TABLE 7

INTRAMURAL AND SPORTS CLUB SPECIALIZATION

College or University	Number of Students Enrolled	Year Established	Graduates Placed
California State University - Long Beach	10	1970	4
Indiana State University	7	1965	70%
University of Maryland		1964	

PHYSICAL EDUCATION FOR EARLY CHILDHOOD

California State University - Long Beach	50	1973	20
University of Illinois - Chicago			
University of Maryland		1974	
University of South Carolina			

PHYSICAL EDUCATION FOR CORRECTIONAL INSTITUTIONS

University of Delaware		'77-'78	
University of Maryland		1974	

PHYSICAL EDUCATION FOR AGING

California State University - Long Beach	20	1970	4

TABLE 8

SPORTS CLUBS
COMMERCIAL SPORTS
BUSINESS MANAGEMENT

College or University	Number of Students Enrolled	Year Established	Graduates Placed
Colorado State University			
Ferris State College			
Iowa State University			
Oregon State University	7	1977	
University of Maryland		1974	

PHYSICAL EDUCATION FOR INDUSTRY

California State University - Long Beach	10	1970	5
Colorado State University		1977	
Indiand State University	2	1972	100%
Rhode Island College			
University of Maryland		1974	

HEALTH SPA

University of Maryland		1974	
University of Utah	10	1973	10

TABLE 9

URBAN COMMUNITY PHYSICAL EDUCATION

College or University	Number of Students Enrolled	Year Established	Graduates Placed
Portland State University	12	'76-'77	
RESEARCH			
Portland State University	5	'76-'77	
MARKETING			
University of Connecticut	15	1976	
COSTUME DESIGN			
University of Connecticut	2	1976	